Released: February 2021

Next MECS will be fielded in 2022.

Table 5.1 End Uses of Fuel Consumption, 2018;

Level: National Data;

Row: End Uses within NAICS Codes;

Column: Energy Sources, including Net Electricity

Unit: Physical Units or Btu

NAICS Code(a)	End Use	Total (trillion Btu)	Net Electricity(b) (million kWh)	Residual Fuel Oil (million bbl)	Fuel Oil and Diesel Fuel(c) (million bbl)	Natural Gas(d) (billion cu ft)	HGL (excluding natural gasoline)(e) (million bbl) (Other(f) (trillion Btu)
		Total United St	ates						
311 - 339	ALL MANUFACTURING INDUSTRIES								
	TOTAL FUEL CONSUMPTION	14,859	759,512	3	15	6,129	17	21	5,307
	Indirect Uses-Boiler Fuel		9,529	2	1	2,475	2	9	
	Conventional Boiler Use		9,529	1	*	793	1	1	
	CHP and/or Cogeneration Process		0	1	1	1,683	1	8	
	Direct Uses-Total Process		597,971	1	6	3,149	D	12	
	Process Heating		79,726	1	2	2,707	6	9	
	Process Cooling and Refrigeration		65,344	*	*	24	*	*	
	Machine Drive		384,760	*	2	165	1	1	
	Electro-Chemical Processes		47,199						
	Other Process Use		20,942	*	1	253	D	2	
	Direct Uses-Total Nonprocess		141,521	*	7	464	D	*	
	Facility HVAC (g)		70,774	*	*	372	D	*	
	Facility Lighting		48,475						
	Other Facility Support		14,639	0	*	51	*	*	
	Onsite Transportation		4,118		6	3	5		
	Conventional Electricity Generation			*	1	27	*	*	
	Other Nonprocess Use		3,515	*	1	11	*	0	
	End Use Not Reported	5,389	10,492	*	*	42	1	0	5,307
311	FOOD								
	TOTAL FUEL CONSUMPTION	1,144	91,975	*	2	644	2	2	93
	Indirect Uses-Boiler Fuel		2,481	*	*	374	1	2	
	Conventional Boiler Use		2,481	*	*	131	*	*	
	CHP and/or Cogeneration Process		2,401	*	*	242	*	7	
	Direct Uses-Total Process		67,386	*	Q	191	1	*	
	Prices Oded-10tal Floredd		07,300		<u>u</u>	131			

Distillate

	Daniel Harting		2 224	*	0	4.54	0	*	
	Process Heating		3,231		Q	161	Q		
	Process Cooling and Refrigeration	-	24,394	*	*	4	*	0	
	Machine Drive Electro-Chemical Processes		38,204			13		U	
	Other Process Use		561 997	0	*	14	*	0	
		-		*	<u>-</u>	14	*	*	
	Direct Uses-Total Nonprocess		20,729		<u>1</u> *	74			
	Facility HVAC (g)		9,741			51		0	
	Facility Lighting		8,163		 		 •		
	Other Facility Support		1,765	0	*	22	T	0	
	Onsite Transportation		799		т 	~ •	τ 		
	Conventional Electricity Generation			0	*	T	T		
	Other Nonprocess Use		261	0		<u>-</u>	T	0	
	End Use Not Reported	103	1,379	0	0	5	*	0	93
3112	Grain and Oilseed Milling								
	TOTAL FUEL CONSUMPTION	246	14,710	*	*	144	*	1	27
	Indirect Uses-Boiler Fuel		504	0	*	96	*	1	
	Conventional Boiler Use		504	0	*	35	0	*	
	CHP and/or Cogeneration Process		0	0	*	60	*	1	
	Direct Uses-Total Process		12,561	*	*	43	*	0	
	Process Heating		610	*	*	37	*	0	
	Process Cooling and Refrigeration		1,585	0	0	*	*	0	
	Machine Drive		10,058	0	*	3	*	0	
	Electro-Chemical Processes		135						
	Other Process Use		173	0	*	2	*	0	
	Direct Uses-Total Nonprocess		1,568	*	*	4	*	0	
	Facility HVAC (g)		616	*	*	4	*	0	
	Facility Lighting		581						
	Other Facility Support		175	0	*	*	*	0	
	Onsite Transportation		69		*	*	*		
	Conventional Electricity Generation			0	*	*	*	0	
	Other Nonprocess Use		126	0	*	*	*	0	
	End Use Not Reported	28	Q	0	0	Q	*	0	27
311221	Wet Corn Milling								
	TOTAL FUEL CONSUMPTION	111	6,013	0	*	59	*	1	18
	Indirect Uses-Boiler Fuel		207	0	0	42	0	1	
	Conventional Boiler Use		207	0	0	8	0	*	
	CHP and/or Cogeneration Process		0	0	0	34	0	*	
	Direct Uses-Total Process		5,533	0	*	16	*	0	
	Process Heating		68	0	0	16	*	0	
	Process Cooling and Refrigeration		1,064	0	0	*	0	0	

	Machine Drive		4,281	0	*	0	*	0	
	Electro-Chemical Processes		120						
	Other Process Use		0	0	*	*	0	0	
	Direct Uses-Total Nonprocess		272	0	*	1	*	0	
	Facility HVAC (g)		134	0	*	*	*	0	
	Facility Lighting		90						
	Other Facility Support		33	0	*	*	*	0	
	Onsite Transportation		16		*	*	*		
	Conventional Electricity Generation			0	*	*	0	0	
	Other Nonprocess Use		0	0	*	0	*	0	
	End Use Not Reported	18	0	0	0	0	0	0	18
	LIN OSC NOC REPORCE	10			<u>ٽ</u>	·			
31131	Sugar								
	TOTAL FUEL CONSUMPTION	106	1,143	*	*	32	*	1	40
	Indirect Uses-Boiler Fuel		176	*	*	24	0	1	
	Conventional Boiler Use		176	*	*	4	0	*	
	CHP and/or Cogeneration Process		0	*	*	19	0	1	
	Direct Uses-Total Process		844	0	*	8	*	*	
	Process Heating		11	0	0	8	0	*	
	Process Cooling and Refrigeration		14	0	0	*	0	0	
	Machine Drive		772	0	*	*	0	0	
	Electro-Chemical Processes		*						
	Other Process Use		47	0	*	*	*	0	
	Direct Uses-Total Nonprocess		123	0	*	*	*	*	
	Facility HVAC (g)		38	0	0	*	*	0	
	Facility Lighting		57						
	Other Facility Support		16	0	*	*	*	0	
	Onsite Transportation		3		*	*	*		
	Conventional Electricity Generation			0	*	0	0	*	
	Other Nonprocess Use		8	0	*	0	0	0	
	End Use Not Reported	40	0	0	0	0	0	0	40
3114	Fruit and Vegetable Preserving and Specialty Foods								
	TOTAL FUEL CONSUMPTION	129	9,928	*	*	88	*	0	2
	Indirect Uses-Boiler Fuel		302	0	*	57	*	0	
	Conventional Boiler Use		302	0	0	17	*	0	
	CHP and/or Cogeneration Process		0	0	*	40	*	0	
	Direct Uses-Total Process		7,626	*	*	23	*	0	
	Process Heating		311	*	*	22	*	0	
	Process Cooling and Refrigeration		3,874	0	*	*	*	0	
	Machine Drive		3,280	0	*	1	*	0	
	Electro-Chemical Processes		10						

	Oth or Dunners Lies		453	2	*	*	w.	0	
	Other Process Use		152	0	*	т О	*	0	
	Direct Uses-Total Nonprocess Facility HVAC (g)		1,914 773	*	*	8 6	*	0	
	Facility HVAC (g) Facility Lighting		7/3	·		U	·		
	Other Facility Support		244	0	*	2	*	0	
	Onsite Transportation		130		*	*	*		
	Conventional Electricity Generation			0	*	*	*	0	
	Other Nonprocess Use		 57	0	*	*	*	0	
	End Use Not Reported	3	86	0	0	1	*	0	2
	Litu ose Not Reported					<u>.</u>			<u>Z</u>
3115	Dairy Products								
	TOTAL FUEL CONSUMPTION	122	11,504	*	*	76	*	0	1
	Indirect Uses-Boiler Fuel		292	*	*	46	*	0	
	Conventional Boiler Use		292	*	*	20	*	0	
	CHP and/or Cogeneration Process		0	0	*	25	*	0	
	Direct Uses-Total Process		8,602	*	*	24	*	0	
	Process Heating		646	0	*	21	*	0	
	Process Cooling and Refrigeration		3,552	*	* 	1	* 	0	
	Machine Drive		4,138	*	*	1	*	0	
	Electro-Chemical Processes		132		 				
	Other Process Use		135	0	* 	<u>1</u>	0	0	
	Direct Uses-Total Nonprocess		2,395	*	*	5	*	0	
	Facility HVAC (g)		1,096	*	*	4	*	0	
	Facility Lighting		858		 		 •		
	Other Facility Support		244	0	т 	1	т 	0	
	Onsite Transportation		167		* 	т ••••••••••••••••••••••••••••••••••••	*		
	Conventional Electricity Generation			0	*	*	0	0	
	Other Nonprocess Use		31	0			*	0	
	End Use Not Reported	3	215	0	0	1	*	0	1
3116	Animal Slaughtering and Processing								
	TOTAL FUEL CONSUMPTION	278	31,687	*	1	144	*	0	16
	Indirect Uses-Boiler Fuel		564	*	*	86	*	0	
	Conventional Boiler Use		564	*	*	37	*	0	
	CHP and/or Cogeneration Process		0	0	*	49	*	0	
	Direct Uses-Total Process		21,666	0	*	32	*	0	
	Process Heating		686	0	*	24	*	0	
	Process Cooling and Refrigeration		11,705	0	*	2	*	0	
	Machine Drive		9,036	0	*	2	*	0	
	Electro-Chemical Processes		89						
	Other Process Use		150	0	*	4	*	0	
	Direct Uses-Total Nonprocess		Q	0	*	25	*	0	

	Facility HVAC (g)		Q	0	*	12	*	0	
	Facility Lighting		Q						
	Other Facility Support		450	0	*	12	*	0	
	Onsite Transportation		216		*	*	*		
	Conventional Electricity Generation			0	*	*	*	0	
	Other Nonprocess Use				*	*	*	0	
	End Use Not Reported	18	24 119	0	0	1	*	0	
	Elia ose Not Reported	10	119			т			10
312	BEVERAGE AND TOBACCO PRODUCTS								
	TOTAL FUEL CONSUMPTION	118	14,260	*	*	52	*	*	Q
	Indirect Uses-Boiler Fuel		250	*	*	34	*	*	
	Conventional Boiler Use		250	*	*	17	*	*	
	CHP and/or Cogeneration Process		0	*	*	17	*	*	
	Direct Uses-Total Process		10,819	0	*	13	*	*	
	Process Heating		418	0	*	11	*	*	
	Process Cooling and Refrigeration		2,739	0	*	*	*	0	
	Machine Drive		7,168	0	*	1	*	0	
	Electro-Chemical Processes		128			<u>-</u>			
	Other Process Use		366	0	*	1	*	0	
	Direct Uses-Total Nonprocess		3,094	*	*	5	*	*	
	Facility HVAC (g)		1,543	0	*	4	*	*	
	Facility Lighting		1,047						
	Other Facility Support		255	0	0	1	*	0	
	Onsite Transportation		169		*	*	*		
	Conventional Electricity Generation			0	*	*	*	0	
	Other Nonprocess Use		80	*	*	*	*	0	
	End Use Not Reported	Q	98	0	0	*	*	0	
	Lilu Ose Not Reported	Q							<u>Q</u>
3121	Beverages								
	TOTAL FUEL CONSUMPTION	111	13,494	*	*	48	*	*	Q
	Indirect Uses-Boiler Fuel		241	*	*	30	*	*	
	Conventional Boiler Use		241	0	*	15	*	*	
	CHP and/or Cogeneration Process		0	*	*	15	*	*	
	Direct Uses-Total Process		10,369	0	*	13	*	*	
	Process Heating		410	0	*	11	*	*	
	Process Cooling and Refrigeration		2,713	0	*	*	*	0	
	Machine Drive		6,755	0	*	1	*	0	
	Electro-Chemical Processes		128						
	Other Process Use		363	0	*	1	*	0	
	Direct Uses-Total Nonprocess		2,786	*	*	5	*	*	
	Facility HVAC (g)		1,362	0	*	4	*	*	
	Facility Lighting		956						

									'
	Other Facility Support		226	0	0	1	*	0	
	Onsite Transportation		164		*	*	*		
	Conventional Electricity Generation			0	*	*	*	0	'
	Other Nonprocess Use		78	*	*	*	*	0	'
	End Use Not Reported	Q	98	0	0	*	*	0	Q
3122	Tobacco								
		7	766	±	<u>Ψ</u>		<u>*</u>		*
	TOTAL FUEL CONSUMPTION	7	766	*	*	4 2	*	0	
	Indirect Uses-Boiler Fuel		8	*	*	3	*	0	
	Conventional Boiler Use		8		*	2	*	0	
	CHP and/or Cogeneration Process		0	0	*	1 1	*	0	
	Direct Uses-Total Process		450 8	0		<u>1</u> *	*	0	
	Process Cooling and Pofrigaration			0	0		· · · · · · · · · · · · · · · · · · ·	0	
	Process Cooling and Refrigeration	<u></u>	25	0	*	0	0 *		
	Machine Drive Electro-Chemical Processes		413	0		·	·	0	
	Other Process Use		1 3	 0	 0	*	0	 0	
	Direct Uses-Total Nonprocess		308	0	*	*	*	0	
	Facility HVAC (g)		180	0	*	*	*	0	
	Facility HVAC (g) Facility Lighting		92						
	Other Facility Support		29	0	0	*	*	0	
	Onsite Transportation		6		*	*	*		
	Conventional Electricity Generation			0	*	0	0	0	
	Other Nonprocess Use		2	0	*	*	*	0	
	End Use Not Reported	*	*	0	0	0	0	0	*
	Liiu OSC NOL NEPOLICU								
313	TEXTILE MILLS								
	TOTAL FUEL CONSUMPTION	64	10,881	*	*	22	*	*	1
	Indirect Uses-Boiler Fuel		228	*	*	11	*	*	
	Conventional Boiler Use		228	*	*	7	*	*	
	CHP and/or Cogeneration Process		0	*	*	4	*	*	
	Direct Uses-Total Process		7,782	0	*	9	*	0	
	Process Heating		859	0	*	8	*	0	
	Process Cooling and Refrigeration		538	0	0	*	0	0	
	Machine Drive		6,104	0	*	*	*	0	
	Electro-Chemical Processes		Q						
	Other Process Use		152	0	0	*	*	0	
	Direct Uses-Total Nonprocess		2,817	0	*	2	*	0	- -
	Facility HVAC (g)		1,757	0	*	2	*	0	
	Facility Lighting		673						
	Other Facility Support		190	0	*	*	*	0	
	Onsite Transportation		81		*	*	*		

1									ĺ
1	Conventional Electricity Generation			0	0	*	0	0	
1	Other Nonprocess Use		116	0	*	0	*	0	
1	End Use Not Reported	1	Q	0	0	0	*	0	1
314	TEXTILE PRODUCT MILLS								
1	TOTAL FUEL CONSUMPTION	22	2,858	0	*	11	*	*	*
1	Indirect Uses-Boiler Fuel		101	0	*	4	*	0	
1	Conventional Boiler Use		101	0	*	3	*	0	
1	CHP and/or Cogeneration Process		0	0	*	*	0	0	
1	Direct Uses-Total Process		2,197	0	*	6	*	*	
1	Process Heating		188	0	*	5	*	*	- -
1	Process Cooling and Refrigeration		135	0	0	0	0	0	- -
1	Machine Drive		1,848	0	0	Q	*	0	
1	Electro-Chemical Processes		*						
1	Other Process Use		Q	0	*	0	0	0	
1	Direct Uses-Total Nonprocess		514	0	*	1	*	0	
1	Facility HVAC (g)		273	0	*	1	*	0	
1	Facility Lighting		184						
1	Other Facility Support		36	0	*	*	0	0	
1	Onsite Transportation		16		*	0	*		
1	Conventional Electricity Generation			0	0	0	0	0	
1	Other Nonprocess Use		Q	0	0	0	0	0	
	End Use Not Reported	*	Q	0	0	*	*	0	*
315	APPAREL								
	TOTAL FUEL CONSUMPTION	4	724	0	*	2	*	*	*
	Indirect Uses-Boiler Fuel		19	0	0	1	*	0	
	Conventional Boiler Use		19	0	0	*	*	0	
	CHP and/or Cogeneration Process		0	0	0	*	*	0	
	Direct Uses-Total Process		375	0	*	*	*	0	
	Process Heating		17	0	0	*	*	0	
	Process Cooling and Refrigeration		44	0	0	*	0	0	
	Machine Drive		302	0	0	*	0	0	
	Electro-Chemical Processes		1						
	Other Process Use		Q	0	*	0	0	0	
	Direct Uses-Total Nonprocess		314	0	0	*	*	*	
	Facility HVAC (g)		164	0	0	*	*	*	
	Facility Lighting		102						
	Other Facility Support		33	0	0	*	0	0	
	Onsite Transportation		6		0	0	*		
	Conventional Electricity Generation			0	0	0	0	0	
	Other Nonprocess Use		9	0	0	*	*	0	
٦									

	End Use Not Reported	*	Q	0	0	*	*	0	k
316	LEATHER AND ALLIED PRODUCTS								
	TOTAL FUEL CONSUMPTION	2	226	0	*	1	*	0	
	Indirect Uses-Boiler Fuel		2	0	*	*	*	0	
	Conventional Boiler Use		2	0	*	*	0	0	
	CHP and/or Cogeneration Process		0	0	*	*	*	0	
	Direct Uses-Total Process		130	0	0	*	*	0	
	Process Heating		11	0	0	*	*	0	
	Process Cooling and Refrigeration		4	0	0	*	0	0	
	Machine Drive		114	0	0	*	*	0	
	Electro-Chemical Processes		*						
	Other Process Use		*	0	0	*	0	0	
	Direct Uses-Total Nonprocess		85	0	*	*	*	0	
	Facility HVAC (g)		48	0	*	*	*	0	
	Facility Lighting		26						-
	Other Facility Support		9	0	0	*	*	0	
	Onsite Transportation		1		*	0	*		-
	Conventional Electricity Generation			0	*	0	0	0	-
	Other Nonprocess Use		Q	0	*	*	0	0	-
	End Use Not Reported	*	8	0	0	*	*	0	k
321	WOOD PRODUCTS								
	TOTAL FUEL CONSUMPTION	387	20,702	*	2	65	1	*	233
	Indirect Uses-Boiler Fuel		385	*	*	19	*	*	
	Conventional Boiler Use		385	0	*	4	*	0	-
	CHP and/or Cogeneration Process		0	*	*	14	*	*	-
	Direct Uses-Total Process		16,928	*	Q	39	*	*	
	Process Heating		980	*	*	33	*	*	
	Process Cooling and Refrigeration		209	0	*	*	*	0	
	Machine Drive		15,583	*	*	2	*	0	
	Electro-Chemical Processes		46						
	Other Process Use		111	0	Q	4	*	0	
	Direct Uses-Total Nonprocess		3,188	*	1	7	1	*	
	Facility HVAC (g)		1,324	*	*	6	*	*	
	Facility Lighting		1,363						
	Other Facility Support		412	0	*	*	*	0	
	Onsite Transportation		64		1	*	1		-
	Conventional Electricity Generation			0	*	*	*	0	-
	Other Nonprocess Use		24	0	*	1	*	0	-
	End Use Not Reported	235	201	0	0	*	*	0	233

321113	Sawmills								
	TOTAL FUEL CONSUMPTION	161	7,212	*	1	17	*	0	114
	Indirect Uses-Boiler Fuel		49	*	*	5	*	0	
	Conventional Boiler Use		49	0	*	1	*	0	
	CHP and/or Cogeneration Process		0	*	*	5	*	0	/
	Direct Uses-Total Process		6,246	0	*	Q	*	0	/
	Process Heating		293	0	*	Q	*	0	
	Process Cooling and Refrigeration		24	0	*	*	0	0	
	Machine Drive		5,901	0	*	*	*	0	
	Electro-Chemical Processes		21						
	Other Process Use		7	0	*	0	*	0	
	Direct Uses-Total Nonprocess		798	*	1	1	*	0	
	Facility HVAC (g)		236	*	*	*	*	0	
	Facility Lighting		399						/
	Other Facility Support		155	0	*	*	*	0	
	Onsite Transportation		5		1	*	*		/
	Conventional Electricity Generation			0	*	*	*	0	/
	Other Nonprocess Use		3	0	*	0	*	0	
	End Use Not Reported	114	119	0	0	*	*	0	114
3212	Veneer, Plywood, and Engineered Woods								
	TOTAL FUEL CONSUMPTION	139	6,710	*	*	30	*	*	83
	Indirect Uses-Boiler Fuel		146	0	*	9	*	*	
	Conventional Boiler Use		146	0	*	2	*	0	
	CHP and/or Cogeneration Process		0	0	*	7	*	*	
	Direct Uses-Total Process		5,688	*	*	19	*	0	
	Process Heating		198	*	*	14	*	0	
	Process Cooling and Refrigeration		81	0	0	*	0	0	
	Machine Drive		5,348	*	*	1	*	0	
	Electro-Chemical Processes		20						
	Other Process Use		41	0	*	4	*	0	
	Direct Uses-Total Nonprocess		842	0	*	2	*	0	
	Facility HVAC (g)		312	0	*	1	*	0	
	Facility Lighting		424						
	Other Facility Support		87	0	*	*	*	0	
 I	Onsite Transportation		8		*	*	*		
	Conventional Electricity Generation			0	*	*	*	0	
	Other Nonprocess Use		10	0	*	1	*	0	
	End Use Not Reported	83	34	0	0	*	*	0	83
	Life Oct 100 10pt 100								
321219	Reconstituted Wood Products								

	TOTAL FUEL CONSUMPTION	78	4,289	*	*	20	*	0	42
	Indirect Uses-Boiler Fuel		40	0	*	5	*	0	
	Conventional Boiler Use		40	0	*	2	*	0	
	CHP and/or Cogeneration Process		0	0	0	3	*	0	
	Direct Uses-Total Process		3,778	*	*	14	*	0	
	Process Heating		115	*	*	9	*	0	
	Process Cooling and Refrigeration		59	0	0	0	0	0	
	Machine Drive		3,588	*	*	1	*	0	
	Electro-Chemical Processes		8						
	Other Process Use		9	0	0	4	0	0	
	Direct Uses-Total Nonprocess		472	0	*	1	*	0	
	Facility HVAC (g)		166	0	*	*	*	0	
	Facility Lighting		251						
	Other Facility Support		42	0	*	*	*	0	
	Onsite Transportation		3		*	0	*		
	Conventional Electricity Generation			0	*	*	0	0	
	Other Nonprocess Use		9	0	0	1	*	0	
	End Use Not Reported	42	0	0	0	0	0	0	42
3219	Other Wood Products								
	TOTAL FUEL CONSUMPTION	78	6,325	*	Q *	15	*	*	35
	Indirect Uses-Boiler Fuel		173	0	*	2	*	0	
	Conventional Boiler Use		173	0	*	1	*	0	
	CHP and/or Cogeneration Process		0	0		2		0	- -
	Direct Uses-Total Process		4,697	0	Q *	7		*	- -
	Process Heating		437	0	*	7	*		
	Process Cooling and Refrigeration		76	0	·*			0	- -
	Machine Drive		4,120	0		-	*	0	- -
	Electro-Chemical Processes		Q				 		- -
	Other Process Use		59	0	Q *	* 	т •	0	- -
	Direct Uses-Total Nonprocess		1,434	*	* ••••••••••••••••••••••••••••••••••••	5	* 	*	- -
	Facility HVAC (g)		732	·	т	4		·	- -
	Facility Lighting		503				 		
	Other Facility Support		149	0	0	*	*	0	
	Onsite Transportation		40	 0	*	*	~		
	Conventional Electricity Generation				*	*	0 *	0	
	Other Nonprocess Use End Use Not Reported	35	Q Q	0	0	*	*	0	35
	Line Ood Hot Reported		<u> </u>						
322	PAPER								
	TOTAL FUEL CONSUMPTION	2,039	50,995	1	1	551	1	3	1,223

i			4 545	4		272	*	2	
	Indirect Uses-Boiler Fuel		1,515	1	* 	372	т 	3	-
	Conventional Boiler Use		1,515	*	*	63	* *	·	
	CHP and/or Cogeneration Process		0	1	* *	309	т *	2	
	Direct Uses-Total Process		42,725	τ 	* 	152	τ 		- -
	Process Heating		1,445	· · · · · · · · · · · · · · · · · · ·	*	138	*	0	
	Process Cooling and Refrigeration		1,373	0	0	*		0	
	Machine Drive		38,960	0	*	7	*	*	
	Electro-Chemical Processes		531						
	Other Process Use		416	0	*	7	*	*	
	Direct Uses-Total Nonprocess		6,507	*	*	26	1	0	
	Facility HVAC (g)		2,973	*	*	17	*	0	
	Facility Lighting		2,550						
	Other Facility Support		770	0	*	2	*	0	
	Onsite Transportation		213		*	*	*		
	Conventional Electricity Generation			*	*	6	*	0	
	Other Nonprocess Use		Q	0	*	*	*	0	
	End Use Not Reported	1,226	Q	*	*	Q	*	0	1,223
322110	Pulp Mills								
	TOTAL FUEL CONSUMPTION	292	1,593	*	*	39	*	*	242
	Indirect Uses-Boiler Fuel		46	*	*	20	*	*	
	Conventional Boiler Use		46	0	*	1	0	0	
	CHP and/or Cogeneration Process		0	*	*	20	*	*	
	Direct Uses-Total Process		1,452	*	*	18	0	0	
	Process Heating		-19	*	*	18	0	0	
	Process Cooling and Refrigeration		35	0	0	0	0	0	
	Machine Drive		1,313	0	*	*	0	0	
	Electro-Chemical Processes		109						
	Other Process Use		14	0	0	0	0	0	
	Direct Uses-Total Nonprocess		96	*	*	1	*	0	
	Facility HVAC (g)		48	0	0	*	*	0	
	Facility Lighting		38	-					
	Other Facility Support		12	0	0	*	0	0	
	Onsite Transportation		-2		*	0	*		
	Conventional Electricity Generation			*	*	1	0	0	
	Other Nonprocess Use		0	0	0	0	0	0	
	End Use Not Reported	242	0	0	*	0	0	0	242
	Eliu Ose Not Reported	L7L							
322121	Paper Mills, except Newsprint								
	TOTAL FUEL CONSUMPTION	696	15,509	1	*	216	*	2	375
	Indirect Uses-Boiler Fuel		500	*	*	148	*	2	
	Conventional Boiler Use		500	*	*	24	*	*	

	CHP and/or Cogeneration Process		0	*	*	124	*	2	
	Direct Uses-Total Process		13,170	*	*	61	*	*	
	Process Heating		562	*	*	54	*	0	
	Process Cooling and Refrigeration		273	0	0	0	0	0	
	Machine Drive		12,174	0	*	2	*	*	
	Electro-Chemical Processes		109						
	Other Process Use		52	0	*	5	0	*	
	Direct Uses-Total Nonprocess		1,840	*	*	6	*	0	
	Facility HVAC (g)		801	*	*	3	*	0	
	Facility Lighting		701						
	Other Facility Support		242	0	*	1	*	0	
	Onsite Transportation		96		*	*	*		
	Conventional Electricity Generation			0	*	3	0	0	
	Other Nonprocess Use		0	0	*	0	*	0	
	End Use Not Reported	375	0	0	*	0	*	0	375
322122	Newsprint Mills								
	TOTAL FUEL CONSUMPTION	35	4,946	0	*	5	*	0	12
	Indirect Uses-Boiler Fuel		336	0	*	3	*	0	
	Conventional Boiler Use		336	0	0	3	*	0	
	CHP and/or Cogeneration Process		0	0	*	*	0	0	
	Direct Uses-Total Process		4,386	0	0	2	0	0	
	Process Heating		23	0	0	2	0	0	
	Process Cooling and Refrigeration		95	0	0	0	0	0	
	Machine Drive		4,267	0	0	0	0	0	
	Electro-Chemical Processes		0						
	Other Process Use		0	0	0	0	0	0	
	Direct Uses-Total Nonprocess		225	0	*	*	*	0	
	Facility HVAC (g)		100	0	0	*	0	0	
	Facility Lighting		125						
	Other Facility Support		0	0	0	*	0	0	
	Onsite Transportation		0		*	0	*		
	Conventional Electricity Generation			0	0	0	0	0	
	Other Nonprocess Use		0	0	0	0	0	0	
	End Use Not Reported	12	0	0	0	0	0	0	12
322130	Paperboard Mills								
	TOTAL FUEL CONSUMPTION	897	16,308	*	*	227	*	1	588
	Indirect Uses-Boiler Fuel		478	*	*	169	*	1	
	Conventional Boiler Use		478	*	*	24	0	*	
	CHP and/or Cogeneration Process		0	*	*	144	*	1	
	Direct Uses-Total Process		14,362	*	*	50	*	0	

	Process Heating		396	*	*	46	*	0	
	Process Cooling and Refrigeration		207	0	0	*	0	0	
	Machine Drive		13,489	0	*	2	*	0	
	Electro-Chemical Processes		18						
	Other Process Use		251	0	*	1	*	0	
	Direct Uses-Total Nonprocess		1,469	0	*	9	*	0	
	Facility HVAC (g)		634	0	*	5	*	0	
	Facility Lighting		671						
	Other Facility Support		156	0	0	1	*	0	
	Onsite Transportation		7		*	*	*		
	Conventional Electricity Generation			0	0	2	0	0	
	Other Nonprocess Use		1	0	*	0	*	0	
	End Use Not Reported	588	0	*	*	0	*	0	588
	Liiu ose Not Reported	300	<u>0</u>			-			300
323	PRINTING AND RELATED SUPPORT								
	TOTAL FUEL CONSUMPTION	59	10,043	*	*	23	*	0	*
	Indirect Uses-Boiler Fuel		68	0	*	3	*	0	
	Conventional Boiler Use		68	0	*	2	*	0	
	CHP and/or Cogeneration Process		0	0	0	Q	0	0	
	Direct Uses-Total Process		6,852	*	*	11	*	0	
	Process Heating		288	0	*	8	*	0	
	Process Cooling and Refrigeration		669	0	0	*	0	0	
	Machine Drive		5,526	0	*	2	*	0	
	Electro-Chemical Processes		3,320 Q						
	Other Process Use		222	*	0	Q	0	0	
	Direct Uses-Total Nonprocess		3,039	*	*	9	*	0	
	Facility HVAC (g)		1,649	*	*	8	*	0	
	Facility Lighting		917						
	Other Facility Support		341	0	*	*	*	0	
	Onsite Transportation		110		*	*	*		
	Conventional Electricity Generation			0	*	*	0	0	
	Other Nonprocess Use		 Q	0	*	*	*	0	
	End Use Not Reported		83	0	*	*	*	0	*
	Ellu ose not reporteu								
324	PETROLEUM AND COAL PRODUCTS								
	TOTAL FUEL CONSUMPTION	3,517	52,035	1	2	1,037	5	*	2,226
	Indirect Uses-Boiler Fuel		321	*	*	330	1	0	
	Conventional Boiler Use		321	*	*	129	*	0	
	CHP and/or Cogeneration Process		0	0	*	201	*	0	
	Direct Uses-Total Process		48,102	*	1	671	4	*	
	Process Heating		-653	*	1	632	4	*	
	Process Cooling and Refrigeration		2,143	0	*	1	*	0	
i									

	Machine Drive		45,877	0	1	14	*	0	
	Electro-Chemical Processes		304						
	Other Process Use		431	0	*	23	*	0	
	Direct Uses-Total Nonprocess		3,549	0	1	27	*	0	
	Facility HVAC (g)		1,697	0	*	7	*	0	
	Facility Lighting		1,231						
	Other Facility Support		556	0	*	1	*	0	
	Onsite Transportation		9		1	*	*		
	Conventional Electricity Generation			0	*	19	*	0	
	Other Nonprocess Use		55	0	*	1	*	0	
	End Use Not Reported	2,237	64	0	*	10	*	0	2,226
324110	Petroleum Refineries								
	TOTAL FUEL CONSUMPTION	3,375	48,497	*	1	958	4	0	2,192
	Indirect Uses-Boiler Fuel		253	*	*	311	1	0	
	Conventional Boiler Use		253	*	*	124	*	0	
	CHP and/or Cogeneration Process		0	0	*	187	*	0	
	Direct Uses-Total Process		45,228	*	*	613	3	0	
	Process Heating		-852	*	*	582	3	0	
	Process Cooling and Refrigeration		1,923	0	0	*	*	0	
	Machine Drive		43,561	0	*	9	*	0	
	Electro-Chemical Processes		288						
	Other Process Use		308	0	*	21	*	0	
	Direct Uses-Total Nonprocess		3,010	0	*	24	*	0	
	Facility HVAC (g)		1,410	0	*	5	*	0	
	Facility Lighting		1,073						
	Other Facility Support		489	0	0	*	*	0	
	Onsite Transportation		2		*	0	*		
	Conventional Electricity Generation			0	*	19	*	0	
	Other Nonprocess Use		37	0	*	*	*	0	
	End Use Not Reported	2,202	6	0	*	10	*	0	2,192
324121	Asphalt Paving Mixture and Block								
	TOTAL FUEL CONSUMPTION	64	1,378	*		40	1	*	6
	Indirect Uses-Boiler Fuel		94	0	*	4	*	0	
	Conventional Boiler Use		94	0	*	1	*	0	
	CHP and/or Cogeneration Process		0	0	*	3	*	0	
	Direct Uses-Total Process		1,066	*	1	34	1	*	
	Process Heating		89	*	*	30	*	*	
	Process Cooling and Refrigeration		16	0	*	*	0	0	
	Machine Drive		909	0	*	4	*	0	
	Electro-Chemical Processes		Q			-			

	Other Draces Hee		40	0	*	4	*	0	
	Other Process Use		48	<u>0</u> 0	*	1	*	0	
	Direct Uses-Total Nonprocess	- -	190		*	1	*	0	
	Facility HVAC (g)	- -	89	0		1		0	
	Facility Lighting	- -	61				 		
	Other Facility Support	- -	22	0	·			0	
	Onsite Transportation		<u>1</u>		τ 				
	Conventional Electricity Generation			0	*		0	0	
	Other Nonprocess Use		18	0			*	0	
	End Use Not Reported	6	27	0	0	*	*	0	6
324122	Asphalt Shingle and Coating Materials								
324122	Asphalt Shingle and Coating Materials								
	TOTAL FUEL CONSUMPTION	18	930	0	*	13	*	0	*
	Indirect Uses-Boiler Fuel		26	0	*	3	*	0	
	Conventional Boiler Use		26	0	*	1	*	0	
	CHP and/or Cogeneration Process		0	0	*	2	*	0	
	Direct Uses-Total Process		723	0	*	9	*	0	
	Process Heating		67	0	*	8	*	0	
	Process Cooling and Refrigeration		44	0	0	*	*	0	
	Machine Drive		596	0	*	1	*	0	
	Electro-Chemical Processes		9						
	Other Process Use		7	0	*	*	*	0	
	Direct Uses-Total Nonprocess		168	0	*	1	*	0	
	Facility HVAC (g)		85	0	*	1	*	0	
	Facility Lighting		64						
	Other Facility Support		15	0	*	*	*	0	
	Onsite Transportation		2		*	*	*		
	Conventional Electricity Generation			0	*	*	0	0	
	Other Nonprocess Use		3	0	*	*	*	0	
	End Use Not Reported	*	12	0	0	0	*	0	*
324191	Petroleum Lubricating Oil and Grease Products								
	TOTAL FUEL CONCUMPTION	35	1 240		*	10	*		
	TOTAL FUEL CONSUMPTION	25	1,340	0	*	18	*	0 0	1
	Indirect Uses-Boiler Fuel		45	0	*	10	^		
	CUR and for Corporation Process		45 0	0 0	*	2	0	0	
	CHP and/or Cogeneration Process				*	8	*	0	
	Direct Uses-Total Process		1,087 40	<u>0</u> 0	*	8	*	0	
	Process Heating					7	*	0	
	Process Cooling and Refrigeration		146	0	0	*	т •	0	
	Machine Drive		862	0	т	т	*	0	
	Electro-Chemical Processes		2				 -		
	Other Process Use		37	0	т 	T	т 	0	
	Direct Uses-Total Nonprocess		207	0	т	1	*	0	

	Facility HVAC (g)		111	0	*	*	*	0	
	Facility Lighting		61						
	Other Facility Support		32	0	*	*	*	0	
	Onsite Transportation		3		*	*	*		
	Conventional Electricity Generation			0	*	*	0	0	
	Other Nonprocess Use		*	0	*	*	*	0	
	End Use Not Reported	1	1	0	*	0	*	0	1
324199	Other Petroleum and Coal Products								
	TOTAL FUEL CONSUMPTION	35	-110	0	*	8	*	0	27
	Indirect Uses-Boiler Fuel		-98	0	*	1	0	0	
	Conventional Boiler Use		-98	0	*	1	0	0	
	CHP and/or Cogeneration Process		0	0	0	*	0	0	
	Direct Uses-Total Process		-2	0	*	6	*	0	
	Process Heating		2	0	*	5	*	0	
	Process Cooling and Refrigeration		14	0	0	0	0	0	
	Machine Drive		-51	0	*	*	*	0	
	Electro-Chemical Processes		1						
	Other Process Use		31	0	*	1	0	0	
	Direct Uses-Total Nonprocess		-27	0	*	*	*	0	
	Facility HVAC (g)		2	0	0	*	*	0	
	Facility Lighting		-28						
	Other Facility Support		-1	0	*	*	*	0	
	Onsite Transportation		1		*	*	*		
	Conventional Electricity Generation			0	*	0	*	0	
	Other Nonprocess Use		-2	0	*	*	0	0	
	End Use Not Reported	27	17	0	0	0	*	0	27
325	CHEMICALS								
	TOTAL FUEL CONSUMPTION	3,813	146,846	*	1 2	2,258	2	5	840
	Indirect Uses-Boiler Fuel		1,818	*	* 1	,159	*	5	
	Conventional Boiler Use		1,818	*	*	375	*	*	
	CHP and/or Cogeneration Process		0	*	*	784	*	4	
	Direct Uses-Total Process		123,656	*	* 1	.,016	D	1	
	Process Heating		5,597	*	*	768	*	*	
	Process Cooling and Refrigeration		13,505	0	*	9	*	0	
	Machine Drive		83,424	0	*	86	*	0	
	Electro-Chemical Processes		17,825						
	Other Process Use		3,306	0	*	154	D	*	
	Direct Uses-Total Nonprocess		18,385	0	*	68	D	*	
	Facility HVAC (g)		9,787	0	*	55	D	*	
	Facility Lighting		5,679						

	Other Facility Support		2,041	0	*	10	*	0	
	Onsite Transportation		366		*	*	*		
	Conventional Electricity Generation			0	*	1	*	0	
	Other Nonprocess Use		511	0	*	2	*	0	
	End Use Not Reported	867	2,987	*	*	15	*	0	840
	2114 000 100 10pc 100								
325110	Petrochemicals								
	TOTAL FUEL CONSUMPTION	569	6,946	0	*	292	*	0	240
	Indirect Uses-Boiler Fuel		132	0	*	120	*	0	/
	Conventional Boiler Use		132	0	*	34	*	0	
	CHP and/or Cogeneration Process		0	0	*	86	*	0	
	Direct Uses-Total Process		6,403	0	*	171	*	0	
	Process Heating		225	0	0	140	*	0	/
	Process Cooling and Refrigeration		1,173	0	0	3	*	0	/
	Machine Drive		4,994	0	*	D	0	0	
	Electro-Chemical Processes		2						
	Other Process Use		9	0	*	D	*	0	
	Direct Uses-Total Nonprocess		411	0	*	1	*	0	
	Facility HVAC (g)		245	0	*	1	*	0	
	Facility Lighting		144						
	Other Facility Support		21	0	0	*	*	0	
	Onsite Transportation		1		*	0	*		
	Conventional Electricity Generation			0	*	*	0	0	
	Other Nonprocess Use		*	0	*	1	0	0	
	End Use Not Reported	240	0	0	0	0	*	0	240
325120	Industrial Gases								
	TOTAL FUEL CONSUMPTION	161	21,611	0	*	80	*	0	4
			21,611	0	*	62	0	0	
	Indirect Uses-Boiler Fuel				*				
	CONVENTIONAL BOILER USE		24	0		8	0	0	
	CHP and/or Cogeneration Process		0	0	0	53	0 *	0	
	Direct Uses-Total Process		20,938	0		18		0	
	Process Gooling and Refrigeration		112	0	0	4	0	0	
	Process Cooling and Refrigeration		582	0	0 *			0	
	Machine Drive		21,132	0		0	0	0	
	Electro-Chemical Processes		-1,302						
	Other Process Use		414	0	0	13	0	0	
	Direct Uses-Total Nonprocess		640	0		*	т 	0	
	Facility HVAC (g)		503	0	0	·	·	0	
	Facility Lighting		78						-
	Other Facility Support		27	0	0	*	0	0	-
	Onsite Transportation		2		*	0	*		

	Conventional Electricity Generation			0	0	0	0	0	
	Other Nonprocess Use		Q	0	0	*	*	0	
	End Use Not Reported	4	9	0	*	0	*	0	4
325180	Other Basic Inorganic Chemicals								
	TOTAL FUEL CONSUMPTION	425	29,720	0	*	210	*	2	72
	Indirect Uses-Boiler Fuel		94	0	*	95	*	1	
	Conventional Boiler Use		94	0	*	16	*	*	
	CHP and/or Cogeneration Process		0	0	*	79	*	1	
	Direct Uses-Total Process		26,470	0	*	111	*	*	
	Process Heating		2,127	0	0	56	*	*	
	Process Cooling and Refrigeration		1,124	0	0	1	0	0	
	Machine Drive		5,813	0	*	50	*	0	
	Electro-Chemical Processes		16,031						
	Other Process Use		1,374	0	*	4	*	0	
	Direct Uses-Total Nonprocess		1,822	0	*	3	*	0	
	Facility HVAC (g)		941	0	*	2	*	0	
	Facility Lighting		600						
	Other Facility Support		140	0	*	*	0	0	
	Onsite Transportation		Q		*	*	*		
	Conventional Electricity Generation			0	*	*	0	0	
	Other Nonprocess Use		102	0	*	Q	*	0	
	End Use Not Reported	77	1,335	0	0	1	*	0	72
325193	Ethyl Alcohol								
	TOTAL FUEL CONSUMPTION	453	10,721	0	*	346	*	2	13
	Indirect Uses-Boiler Fuel		319	0	0	198	*	2	
	Conventional Boiler Use		319	0	0	111	*	0	
	CHP and/or Cogeneration Process		0	0	0	87	*	2	
	Direct Uses-Total Process		9,685	0	*	137	*	0	
	Process Heating		290	0	0	122	*	0	
	Process Cooling and Refrigeration		1,399	0	*	1	0	0	
	Machine Drive		7,680	0	*	1	*	0	
	Electro-Chemical Processes		Q						
	Other Process Use		122	0	*	13	0	0	
	Direct Uses-Total Nonprocess		717	0	*	11	*	0	
	Facility HVAC (g)		277	0	*	7	*	0	
	Facility Lighting		344			-			
	Other Facility Support		78	0	*	4	*	0	
	Onsite Transportation		Q		*	*	*		
	Conventional Electricity Generation		-	0	*	*	0	0	
	Other Nonprocess Use		2		*	*	*	0	
	Other Nonprocess ose								

	End Use Not Reported	13	0	0	0	0	*	0	13
325194	Cyclic Crudes, Intermediate and Gum and Wood Chemicals								
	TOTAL FUEL CONSUMPTION	88	3,141	0	*	49	*	0	26
	Indirect Uses-Boiler Fuel		135	0	*	22	*	0	
	Conventional Boiler Use		135	0	*	11	*	0	
	CHP and/or Cogeneration Process		0	0	*	11	0	0	
	Direct Uses-Total Process		2,492	0	*	26	*	0	
	Process Heating		198	0	*	18	*	0	
	Process Cooling and Refrigeration		636	0	0	*	0	0	
	Machine Drive		1,405	0	*	0	*	0	
	Electro-Chemical Processes		249						
	Other Process Use		3	0	0	7	0	0	
	Direct Uses-Total Nonprocess		514	0	*	*	*	0	
	Facility HVAC (g)		237	0	*	*	*	0	
	Facility Lighting		147						
	Other Facility Support		117	0	0	*	*	0	
	Onsite Transportation		2		*	*	*		
	Conventional Electricity Generation			0	*	0	0	0	
	Other Nonprocess Use		10	0	*	0	0	0	- -
	End Use Not Reported	28	*	0	0	2	*	0	26
325199	Other Basic Organic Chemicals								
	TOTAL FUEL CONSUMPTION	742	18,970	*	*	386	*	1	243
	Indirect Uses-Boiler Fuel		362	*	*	206	*	1	
	Conventional Boiler Use		362	*	*	69	*	*	
	CHP and/or Cogeneration Process		0	*	*	137	*	1	
	Direct Uses-Total Process		15,460	0	*	163	*	*	
	Process Heating		330	0	*	116	*	*	
	Process Cooling and Refrigeration		2,388	0	*	1	*	0	
	Machine Drive		12,016	0	*	11	*	0	
	Electro-Chemical Processes		411						
	Other Process Use		315	0	*	35	*	*	
	Direct Uses-Total Nonprocess		2,266	0	*	5	*	0	
	Facility HVAC (g)		1,054	0	0	3	*	0	
	Facility Lighting		782						
	Other Facility Support		363	0	*	2	*	0	
	Onsite Transportation		59		*	*	*		
	Conventional Electricity Generation			0	*	*	*	0	
	Other Nonprocess Use		8	0	*	*	*	0	
	End Use Not Reported	258	882	0	0	12	*	0	243

325211	Plastics Materials and Resins								
			10.004			400			106
	TOTAL FUEL CONSUMPTION	668	16,884	0	D *	402	D	D	186
	Indirect Uses-Boiler Fuel		121	0	*	272	*	0	
	Conventional Boiler Use		121	0	* *	37	*	0	
	CHP and/or Cogeneration Process		0	0		236	*	0	
	Direct Uses-Total Process		14,839	0	D	125	D	D	!
	Process Heating		575	0	D *	79	*	D	
	Process Cooling and Refrigeration		1,254	0	*	1	0	0	!
	Machine Drive		10,812	0	*	4	*	0	!
	Electro-Chemical Processes		2,038						P
	Other Process Use		160	0	*	41	D	0	!
	Direct Uses-Total Nonprocess		1,715	0	*	4	*	0	!
	Facility HVAC (g)		844	0	*	3	*	0	P
	Facility Lighting		604						r
	Other Facility Support		230	0	*	1	*	0	'
	Onsite Transportation		31		*	*	*		F
	Conventional Electricity Generation			0	*	*	0	0	'
	Other Nonprocess Use		7	0	*	*	*	0	
	End Use Not Reported	188	Q	0	*	*	*	0	186
325212	Synthetic Rubber								
	TOTAL FUEL CONSUMPTION	35	1,386	0	*	19	*	*	9
	Indirect Uses-Boiler Fuel		21	0	*	16	*	*	
	Conventional Boiler Use		21	0	*	10	*	*	
	CHP and/or Cogeneration Process		0	0	*	6	0	*	
	Direct Uses-Total Process		1,139	0	*	2	*	0	
	Process Heating		58	0	0	2	*	0	
	Process Cooling and Refrigeration		310	0	0	*	*	0	
	Machine Drive		766	0	*	*	*	0	
	Electro-Chemical Processes		*						
	Other Process Use		5	0	*	*	*	0	
	Direct Uses-Total Nonprocess		215	0	*	*	*	0	
	Facility HVAC (g)		117	0	0	*	*	0	
	Facility Lighting		75						
	Other Facility Support		15	0	*	*	*	0	
	Onsite Transportation		6		*	*	*		
	Conventional Electricity Generation			0	*	0	0	0	
	Other Nonprocess Use		4	0	*	*	0	0	
		 9	10	0		*	*	0	
	End Use Not Reported	y	10	U	0			U	9
	Artificial and Synthetic Fibers and Filaments								
325220									

	TOTAL FUEL CONSUMPTION	33	2,694	0	*	22	*	*	*
	Indirect Uses-Boiler Fuel		74	0	*	14	*	*	
	Conventional Boiler Use		74	0	*	8	*	0	
	CHP and/or Cogeneration Process		0	0	0	5	*	*	
	Direct Uses-Total Process		2,172	0	*	6	*	0	
	Process Heating		159	0	*	6	*	0	
	Process Cooling and Refrigeration		281	0	0	0	0	0	
	Machine Drive		1,709	0	*	*	*	0	
	Electro-Chemical Processes		4						
	Other Process Use		21	0	0	*	*	0	
	Direct Uses-Total Nonprocess		446	0	*	2	*	0	
	Facility HVAC (g)		227	0	0	2	*	0	
	Facility Lighting		133						
	Other Facility Support		40	0	0	*	*	0	
	Onsite Transportation		8		*	0	*		
	Conventional Electricity Generation			0	0	0	0	0	
	Other Nonprocess Use		39	0	*	0	*	0	
	End Use Not Reported	*	1	0	0	0	*	0	*
325311	Nitrogenous Fertilizers								
	TOTAL FUEL CONSUMPTION	233	5,131	0	*	205	*	0	2
	Indirect Uses-Boiler Fuel		52	0	•	51	*	0	
	Conventional Boiler Use		52	0	*	25	*	0	
	Conventional Boiler Use CHP and/or Cogeneration Process		0	0	*	26	0	0	
	Conventional Boiler Use CHP and/or Cogeneration Process Direct Uses-Total Process		0 4,635	0 0 0	*	26 153		0 0 0	
	Conventional Boiler Use CHP and/or Cogeneration Process Direct Uses-Total Process Process Heating		0 4,635 69	0 0 0	*	26 153 131	0 *	0 0 0	
	Conventional Boiler Use CHP and/or Cogeneration Process Direct Uses-Total Process Process Heating Process Cooling and Refrigeration		0 4,635 69 497	0 0 0 0	* 0 0	26 153 131 0	*	0 0 0 0	
	Conventional Boiler Use CHP and/or Cogeneration Process Direct Uses-Total Process Process Heating Process Cooling and Refrigeration Machine Drive		0 4,635 69 497 3,983	0 0 0 0 0	* 0 0 *	26 153 131 0 4	*	0 0 0 0 0	
	Conventional Boiler Use CHP and/or Cogeneration Process Direct Uses-Total Process Process Heating Process Cooling and Refrigeration Machine Drive Electro-Chemical Processes	 	0 4,635 69 497 3,983	0 0 0 0 0	* 0 0	26 153 131 0 4	0 *	0 0 0 0 0 0	
	Conventional Boiler Use CHP and/or Cogeneration Process Direct Uses-Total Process Process Heating Process Cooling and Refrigeration Machine Drive Electro-Chemical Processes Other Process Use	 	0 4,635 69 497 3,983 Q	0 0 0 0 0 0	* 0 0 *	26 153 131 0 4 	*	0 0 0 0 0 0	
	Conventional Boiler Use CHP and/or Cogeneration Process Direct Uses-Total Process Process Heating Process Cooling and Refrigeration Machine Drive Electro-Chemical Processes Other Process Use Direct Uses-Total Nonprocess		0 4,635 69 497 3,983 Q Q	0 0 0 0 0 0	* 0 0 *	26 153 131 0 4 19	0 * * * * * * * * * * * * * * * * * * *	0 0 0 0 0 0 0	
	Conventional Boiler Use CHP and/or Cogeneration Process Direct Uses-Total Process Process Heating Process Cooling and Refrigeration Machine Drive Electro-Chemical Processes Other Process Use Direct Uses-Total Nonprocess Facility HVAC (g)		0 4,635 69 497 3,983 Q Q 444	0 0 0 0 0 0	* 0 0 *	26 153 131 0 4 	0 * * * * * * * * * * * * * * * * * * *	0 0 0 0 0 0 0 0	
	Conventional Boiler Use CHP and/or Cogeneration Process Direct Uses-Total Process Process Heating Process Cooling and Refrigeration Machine Drive Electro-Chemical Processes Other Process Use Direct Uses-Total Nonprocess Facility HVAC (g) Facility Lighting		0 4,635 69 497 3,983 Q Q 444 192	0 0 0 0 0 0 	***************************************	26 153 131 0 4 19	0 * * * * * * * * * * * * * * * * * * *	0 0 0 0 0 0 0 0	
	Conventional Boiler Use CHP and/or Cogeneration Process Direct Uses-Total Process Process Heating Process Cooling and Refrigeration Machine Drive Electro-Chemical Processes Other Process Use Direct Uses-Total Nonprocess Facility HVAC (g) Facility Lighting Other Facility Support		0 4,635 69 497 3,983 Q Q 444 192 178 61	0 0 0 0 0 0	* 0 0 *	26 153 131 0 4 19 1 1	0 * 0 * 0 0 *	0 0 0 0 0 0 0 0 0 0	
	Conventional Boiler Use CHP and/or Cogeneration Process Direct Uses-Total Process Process Heating Process Cooling and Refrigeration Machine Drive Electro-Chemical Processes Other Process Use Direct Uses-Total Nonprocess Facility HVAC (g) Facility Lighting Other Facility Support Onsite Transportation		0 4,635 69 497 3,983 Q Q 444 192 178 61	0 0 0 0 0 0 0 0 0	***************************************	26 153 131 0 4 19 1	* * 0 * 0 * 1 0 * * * * * * * * * * * *	0 0 0 0 0 0 0 0 0 0	
	Conventional Boiler Use CHP and/or Cogeneration Process Direct Uses-Total Process Process Heating Process Cooling and Refrigeration Machine Drive Electro-Chemical Processes Other Process Use Direct Uses-Total Nonprocess Facility HVAC (g) Facility Lighting Other Facility Support Onsite Transportation Conventional Electricity Generation		0 4,635 69 497 3,983 Q Q 444 192 178 61 4	0 0 0 0 0 0 0 0 0	***************************************	26 153 131 0 4 19 1 1 1	0 0 **	0 0 0 0 0 0 0 0 0 0	
	Conventional Boiler Use CHP and/or Cogeneration Process Direct Uses-Total Process Process Heating Process Cooling and Refrigeration Machine Drive Electro-Chemical Processes Other Process Use Direct Uses-Total Nonprocess Facility HVAC (g) Facility Lighting Other Facility Support Onsite Transportation Conventional Electricity Generation Other Nonprocess Use		0 4,635 69 497 3,983 Q Q 444 192 178 61 4 9	0 0 0 0 0 0 0 0 0	* 0 0 * * * * * * * * * * * * * * * * *	26 153 131 0 4 19 1 1 *	* * 0 * 0 * 1 0 * * * * * * * * * * * *	0 0 0 0 0 0 0 0 0 0	
	Conventional Boiler Use CHP and/or Cogeneration Process Direct Uses-Total Process Process Heating Process Cooling and Refrigeration Machine Drive Electro-Chemical Processes Other Process Use Direct Uses-Total Nonprocess Facility HVAC (g) Facility Lighting Other Facility Support Onsite Transportation Conventional Electricity Generation		0 4,635 69 497 3,983 Q Q 444 192 178 61 4	0 0 0 0 0 0 0 0 0	* 0 0 * * * * * * * * * * * * * * * * *	26 153 131 0 4 19 1 1 1	0 * * * 0 * * * *	0 0 0 0 0 0 0 0 0 0	
375217	Conventional Boiler Use CHP and/or Cogeneration Process Direct Uses-Total Process Process Heating Process Cooling and Refrigeration Machine Drive Electro-Chemical Processes Other Process Use Direct Uses-Total Nonprocess Facility HVAC (g) Facility Lighting Other Facility Support Onsite Transportation Conventional Electricity Generation Other Nonprocess Use End Use Not Reported		0 4,635 69 497 3,983 Q Q 444 192 178 61 4 9	0 0 0 0 0 0 0 0 0	* 0 0 * * * * * * * * * * * * * * * * *	26 153 131 0 4 19 1 1 *	0 * * * 0 * * * *	0 0 0 0 0 0 0 0 0 0	
325312	Conventional Boiler Use CHP and/or Cogeneration Process Direct Uses-Total Process Process Heating Process Cooling and Refrigeration Machine Drive Electro-Chemical Processes Other Process Use Direct Uses-Total Nonprocess Facility HVAC (g) Facility Lighting Other Facility Support Onsite Transportation Conventional Electricity Generation Other Nonprocess Use		0 4,635 69 497 3,983 Q Q 444 192 178 61 4 9	0 0 0 0 0 0 0 0 0	* 0 0 * * * * * * * * * * * * * * * * *	26 153 131 0 4 19 1 1 *	0 * * * 0 * * * *	0 0 0 0 0 0 0 0 0 0	
325312	Conventional Boiler Use CHP and/or Cogeneration Process Direct Uses-Total Process Process Heating Process Cooling and Refrigeration Machine Drive Electro-Chemical Processes Other Process Use Direct Uses-Total Nonprocess Facility HVAC (g) Facility Lighting Other Facility Support Onsite Transportation Conventional Electricity Generation Other Nonprocess Use End Use Not Reported		0 4,635 69 497 3,983 Q Q 444 192 178 61 4 9	0 0 0 0 0 0 0 0 0	* 0 0 * * * * * * * * * * * * * * * * *	26 153 131 0 4 19 1 1 *	0 * * * 0 * * * *	0 0 0 0 0 0 0 0 0 0	
325312	Conventional Boiler Use CHP and/or Cogeneration Process Direct Uses-Total Process Process Heating Process Cooling and Refrigeration Machine Drive Electro-Chemical Processes Other Process Use Direct Uses-Total Nonprocess Facility HVAC (g) Facility Lighting Other Facility Support Onsite Transportation Conventional Electricity Generation Other Nonprocess Use End Use Not Reported		0 4,635 69 497 3,983 Q Q 444 192 178 61 4 9	0 0 0 0 0 0 0 0 0	* 0 0 * * * * * * * * * * * * * * * * *	26 153 131 0 4 19 1 1 *	0 * * * 0 * * * *	0 0 0 0 0 0 0 0 0 0	

	Indirect Uses-Boiler Fuel		14	0	*	2	*	0	
	Conventional Boiler Use		14	0	0	1	*	0	
	CHP and/or Cogeneration Process		0	0	*	1	*	0	
	Direct Uses-Total Process		D	*	D	21	*	D	
	Process Heating		20	*	D	20	*	D	
	Process Cooling and Refrigeration		58	0	0	0	0	0	
	Machine Drive		D	0	*	*	*	0	
	Electro-Chemical Processes		0						
	Other Process Use		0	0	*	1	0	0	
	Direct Uses-Total Nonprocess		185	0	*	*	*	0	
	Facility HVAC (g)		80	0	*	*	*	0	
	Facility Lighting		68						
	Other Facility Support		37	0	*	*	*	0	
	Onsite Transportation		*		*	0	*		
	Conventional Electricity Generation			0	*	0	0	0	
	Other Nonprocess Use		0	0	*	0	0	0	
	End Use Not Reported	*	0	0	0	0	*	0	*
	Liiu OSE Not Reported								
3254	Pharmacouticals and Modisinos								
3234	Pharmaceuticals and Medicines								
	TOTAL FUEL CONSUMPTION	114	10,442	0	*	60	*	*	16
	Indirect Uses-Boiler Fuel		253	0	*	35	*	*	
	Conventional Boiler Use		253	0	*	19	*	*	
	CHP and/or Cogeneration Process		0	0	*	16	*	0	
	Direct Uses-Total Process		5,271	0	*	7	*	0	
			284	0	*	6	*	0	
	Process Cooling and Refrigeration				*	*			
	Process Cooling and Refrigeration		1,882	0	*	*	0	0	
	Machine Drive		2,803	0				0	
	Electro-Chemical Processes		55		*		 		
	Other Process Use		247	0	т 		τ 	0	
	Direct Uses-Total Nonprocess		4,757	0		17	*		
	Facility HVAC (g)		3,000	0	*	15	*	*	
	Facility Lighting		1,054						
	Other Facility Support		450	0	*	1	*	0	
	Onsite Transportation		67		*	*	*		
	Conventional Electricity Generation			0	*	*	*	0	
	Other Nonprocess Use		186	0	*	*	*	0	
	End Use Not Reported	17	161	0	0	1	*	0	16
325412	Pharmaceutical Preparation								
	TOTAL FUEL CONSUMPTION	66	6,121	0	*	29	*	*	14
	Indirect Uses-Boiler Fuel		152	0	*	13	*	*	
	Conventional Boiler Use		152	0	*	9	*	*	

CHP and/or Cogeneration Process		0	0	*	4	*	0	
				*		*		
				*		*		
				*	*	0		
				*	*	*		
				*	*	*		
				*	11	*	*	
				*		*	*	
				*	*	*		
				*	*	*		
				*	*	Λ		
				*	*	*		
	15			0	*	*		14
End Use NOT Reported	1.0	34	U	U			U	
Photographic Film, Paper, Plate, and Chemicals								
TOTAL FUEL CONSUMPTION	8	921	*	*	3	*	0	2
Indirect Uses-Boiler Fuel		9	*	*	2	0	0	/
Conventional Boiler Use		9	0	*	1	0	0	/
CHP and/or Cogeneration Process		0	*	*	1	0	0	/
Direct Uses-Total Process		560	0	*	1	*	0	/
Process Heating		36	0	*	*	0	0	/
Process Cooling and Refrigeration		147	0	*	*	0	0	
Machine Drive		316	0	*	*	*	0	
Electro-Chemical Processes		41						
Other Process Use		20	0	*	*	0	0	
Direct Uses-Total Nonprocess		322	0	*	*	*	0	
Facility HVAC (g)		173	0	*	*	0	0	
Facility Lighting		94						
Other Facility Support		41	0	*	*	*	0	
Onsite Transportation		3		*	0	*		
Conventional Electricity Generation			0	*	*	0	0	
Other Nonprocess Use		12	0	*	*	*	0	
End Use Not Reported	2	30	0	0	*	*	0	2
PLASTICS AND RUBBER PRODUCTS								
TOTAL FUEL CONTRIBUTION	256	40.242	*	*	20	4		*
	256		т •	т ••••••••••••••••••••••••••••••••••••		1		
			*			т 		
			*			т 		
				*		*		
Direct Uses-Total Process		36,803	0	*	30	*	0	
	TOTAL FUEL CONSUMPTION Indirect Uses-Boiler Fuel Conventional Boiler Use CHP and/or Cogeneration Process Direct Uses-Total Process Process Heating Process Cooling and Refrigeration Machine Drive Electro-Chemical Processes Other Process Use Direct Uses-Total Nonprocess Facility HVAC (g) Facility Lighting Other Facility Support Onsite Transportation Conventional Electricity Generation Other Nonprocess Use End Use Not Reported	Direct Uses-Total Process Process Heating Process Cooling and Refrigeration Machine Drive Electro-Chemical Processes Other Process Use Direct Uses-Total Nonprocess Other Process Use Direct Uses-Total Nonprocess Facility HVAC (g) Facility Lighting Other Facility Support Onsite Transportation Conventional Electricity Generation Other Nonprocess Use End Use Not Reported 15 Photographic Film, Paper, Plate, and Chemicals TOTAL FUEL CONSUMPTION 8 Indirect Uses-Boiler Fuel Conventional Boiler Use CHP and/or Cogeneration Process Direct Uses-Total Process Process Heating Process Cooling and Refrigeration Machine Drive Electro-Chemical Processes Direct Uses-Total Nonprocess Direct Uses-Total Nonprocess Direct Uses-Total Nonprocess Electro-Chemical Processes Other Process Use Direct Uses-Total Nonprocess Direct Uses-Total Nonprocess Electro-Chemical Processes Other Process Use Direct Uses-Total Nonprocess Electro-Chemical Processes Electro-Chemical Processes Conventional Electricity Generation Onsite Transportation Conventional Electricity Generation Other Nonprocess Use End Use Not Reported End Use Not Reported Conventional Electricity Generation Other Nonprocess Use End Use Not Reported End Use Not Reported Conventional Electricity Generation Other Nonprocess Use End Use Not Reported End Use Not Reported Conventional Electricity Generation Other Nonprocess End Use Not Reported Conventional Electricity Generation Other Nonprocess End Use Not Reported Conventional Electricity Generation Other Nonprocess End Use Not Reported Conventional Electricity Generation Other Nonprocess End Use Not Reported Conventional Electricity Generation Other Nonprocess End Use Not Reported Conventional Electricity Generation Conventional Electricity Gen	Direct Uses-Total Process 3,165 Process Heating 201 Process Cooling and Refrigeration 994 Machine Drive 1,745 Electro-Chemical Processes 30 Other Process Use 196 Direct Uses-Total Monprocess 2,749 Facility HVAC (g) 1,681 Facility Lighting 609 Other Facility Support 265 Onsite Transportation 47 Conventional Electricity Generation Other Nonprocess Use 146 End Use Not Reported 15 54 **TOTAL FUEL CONSUMPTION **B Separation Process Uses Separation Process Separation Process Separation Process Separation Process Separation Sep	Direct Uses-Total Process - 3,165 0 Process Heating - 201 0 Process Cooling and Refrigeration - 994 0 Machine Drive - 1,745 0 Electro-Chemical Processes - 30 - Other Process Use - 196 0 Other Tuest Uses-Total Nonprocess - 2,749 0 Facility HVAC (g) - 1,681 0 Facility Lighting - 609 - Other Facility Support - 265 0 Onsite Transportation - 47 - Conventional Electricity Generation - 47 - Other Nonprocess Use - 146 0 End Use Not Reported 15 54 0 - 9 0 - 9 0 - 9 0 CHP and/	Direct Uses-Total Process	Direct Uses-Total Process - 3,165 0 * 5	Direct User-Total Process	Direct User-Total Process 3,155 0 4 0 0 4 0 0 0 4 0 0 0 0 0 0 0 0

Proce Mach Electr Other	ess Heating ess Cooling and Refrigeration hine Drive		5,602 4,131			28			
Mach Electr Other				0	0	*	0	0	
Electr Other			25,321	0	*	*	*	0	
Other	ro-Chemical Processes		Q						
	r Process Use		1,323	0	*	Q	*	0	
Direct	: Uses-Total Nonprocess		11,408	0	*	21	1	0	
	ity HVAC (g)		5,074	0	0	20	*	0	
	ity Lighting		3,699						
	r Facility Support		1,439	0	0	1	*	0	
	te Transportation		582		*	*	*		
	entional Electricity Generation			0	*	*	0	0	
	r Nonprocess Use		Q	0	*	0	*	0	
	se Not Reported	Q	Q	0	0	0	*	0	*
327 NONM	METALLIC MINERAL PRODUCTS								
TOTAL	L FUEL CONSUMPTION	821	37,953	*	4	335	1	9	131
	ct Uses-Boiler Fuel		134	0	*	11	*	*	
	rentional Boiler Use		134	0	*	2	*	*	
	and/or Cogeneration Process		0	0	*	9	*	*	
	t Uses-Total Process		33,024	*	2	305	*	9	
	ess Heating		7,710	*	Q	273	*	7	
	ess Cooling and Refrigeration		1,664	0	0	3	0	*	
	hine Drive		20,746	*	1	24	*	1	
	ro-Chemical Processes		794						
Other	r Process Use		2,110	0	*	Q	*	Q	
Direct	: Uses-Total Nonprocess		4,645	0	2	18	*	*	
Facilit	ity HVAC (g)		2,124	0	*	15	*	0	
	ity Lighting		1,718						
	r Facility Support		477	0	*	2	*	*	
	te Transportation		143		2	*	*		
Conve	rentional Electricity Generation			0	*	*	*	0	
	r Nonprocess Use		182	0	*	1	*	0	
	se Not Reported	132	150	0	0	1	*	0	131
327120 Clay E	Building Material and Refractories								
	L FUEL CONSUMPTION	47	1,769	0	*	35	*	*	1
	ct Uses-Boiler Fuel		*	0	0	*	*	0	
	rentional Boiler Use		*	0	0	*	*	0	
	and/or Cogeneration Process		0	0	0	*	0	0	
Direct	Uses-Total Process		1,534	0	*	34	*	*	- -
	ess Heating		287 28	0	*	33	*	*	- -
	ess Cooling and Refrigeration				0	0	0	0	

	Machine Drive		1,182	0	*	*	*	0	
	Electro-Chemical Processes		0						
	Other Process Use		Q	0	*	*	*	*	
	Direct Uses-Total Nonprocess		225	0	*	1	*	0	
	Facility HVAC (g)		83	0	*	1	*	0	
	Facility Lighting		117						
	Other Facility Support		18	0	*	*	0	0	
	Onsite Transportation		6		*	*	*		
	Conventional Electricity Generation			0	*	0	0	0	
	Other Nonprocess Use		*	0	*	0	*	0	
	End Use Not Reported	1	9	0	0	0	*	0	1
327211	Flat Glass								
	TOTAL FUEL CONSUMPTION	47	1,419	0	*	40	*	0	1
	Indirect Uses-Boiler Fuel		4	0	0	*	0	0	
	Conventional Boiler Use		4	0	0	*	0	0	
	CHP and/or Cogeneration Process		0	0	0	*	0	0	
	Direct Uses-Total Process		1,189	0	*	38	*	0	
	Process Heating		501	0	0	38	*	0	
	Process Cooling and Refrigeration		175	0	0	0	0	0	
	Machine Drive		392	0	*	*	*	0	
	Electro-Chemical Processes		59						
	Other Process Use		62	0	*	*	0	0	
	Direct Uses-Total Nonprocess		225	0	*	2	*	0	
	Facility HVAC (g)		105	0	0	1	0	0	
	Facility Lighting		75						
	Other Facility Support		19	0	0	*	0	0	
	Onsite Transportation		22		*	0	*		
	Conventional Electricity Generation			0	*	0	0	0	
	Other Nonprocess Use		4	0	*	*	0	0	
	End Use Not Reported	1	2	0	0	0	*	0	1
327212	Other Pressed and Blown Glass and Glassware								
32/212	Other Presseu and blown diass and diassware								
	TOTAL FUEL CONSUMPTION	31	2,135	0	*	22	*	0	1
	Indirect Uses-Boiler Fuel		8	0	*	1	*	0	
	Conventional Boiler Use		8	0	*	*	0	0	
	CHP and/or Cogeneration Process		0	0	0	*	*	0	
	Direct Uses-Total Process		1,794	0	*	20	*	0	
	Process Heating		900	0	*	19	*	0	
	Process Cooling and Refrigeration		200	0	0	*	0	0	
	Machine Drive		657	0	*	1	*	0	
	Electro-Chemical Processes		15						
									

	Other Process Use		21	0	*	*	*	0	
	Direct Uses-Total Nonprocess		333	0	*	1	*	0	- -
	Facility HVAC (g)		155	0	0	1	*	0	
	Facility Lighting		134	U		<u>_</u>			
	Other Facility Support		32	0	0	*	*		
					*		*	0	
	Onsite Transportation		11		*	0 *			
	Conventional Electricity Generation			0	*		0	0	
	Other Nonprocess Use			0		0	*	0	
	End Use Not Reported	1	0	0	0	0	· · · · · · · · · · · · · · · · · · ·	0	1
327213	Glass Containers								
32/213	Glass Containers								
	TOTAL FUEL CONSUMPTION	54	3,447	0	*	41	*	0	*
	Indirect Uses-Boiler Fuel		*	0	0	*	0	0	
	Conventional Boiler Use		*	0	0	0	0	0	
	CHP and/or Cogeneration Process		0	0	0	*	0	0	
	Direct Uses-Total Process		3,039	0	*	38	*	0	
	Process Heating		1,310	0	0	36	*	0	
	Process Cooling and Refrigeration		77	0	0	*	0	0	
	Machine Drive		1,572	0	*	2	0	0	
	Electro-Chemical Processes		34						
	Other Process Use		46	0	0	0	0	0	
	Direct Uses-Total Nonprocess		403	0	*	3	*	0	
	Facility HVAC (g)		193	0	0	2	*	0	
	Facility Lighting		168						
	Other Facility Support		22	0	0	*	0	0	
	Onsite Transportation		5		*	0	*		
	Conventional Electricity Generation			0	*	0	0	0	
	Other Nonprocess Use		15	0	0	*	0	0	
	End Use Not Reported	*	5	0	0	*	0	0	*
327215	Glass Products from Purchased Glass								
	TOTAL FUEL CONSUMPTION	21	3,675	0	*	8	*	0	*
	Indirect Uses-Boiler Fuel		8	0	*	*	*	0	
	Conventional Boiler Use		8	0	*	*	*	0	
	CHP and/or Cogeneration Process		0	0	*	*	*	0	
	Direct Uses-Total Process		2,927	0	*	6	*	0	
	Process Heating		1,418	0	0	5	*	0	
	Process Cooling and Refrigeration		181	0	0	*	0	0	
	Machine Drive		909	0	*	*	*	0	
	Electro-Chemical Processes		52						
	Other Process Use		368	0	*	*	*	0	
	Direct Uses-Total Nonprocess		738	0	*	1	*	0	

	Facility LIVAC (c)		240	0	*	1	*	0	
	Facility HVAC (g)		349	0		1		0	
	Facility Lighting		211			 •			
	Other Facility Support		79	0	*	*	*	0	
	Onsite Transportation		27		*	*	*		
	Conventional Electricity Generation			0	*	*		0	
	Other Nonprocess Use		72	0		*	т 	0	
	End Use Not Reported		2	0	0		*	0	-
327310	Cements								
	TOTAL FUEL CONSUMPTION	296	11,444	0	*	55	*	5	92
	Indirect Uses-Boiler Fuel		43	0	0	*	0	*	
	Conventional Boiler Use		43	0	0	*	0	*	
	CHP and/or Cogeneration Process		0	0	0	*	0	*	
	Direct Uses-Total Process		10,882	0	*	55	*	5	
	Process Heating		1,142	0	*	35	*	4	
	Process Cooling and Refrigeration		440	0	0	3	0	*	
	Machine Drive		8,659	0	*	17	*	1	
	Electro-Chemical Processes		257						
	Other Process Use		385	0	*	0	0	0	
	Direct Uses-Total Nonprocess		518	0	*	*	*	*	
	Facility HVAC (g)		266	0	*	*	*	0	
	Facility Lighting		169						
	Other Facility Support		51	0	0	*	*	*	
	Onsite Transportation		18		*	0	*		
	Conventional Electricity Generation			0	*	0	0	0	
	Other Nonprocess Use		13	0	*	0	*	0	
	End Use Not Reported	92	1	0	0	*	0	0	92
327410	Lime								
	TOTAL FUEL CONSUMPTION	106	1,384	0	*	18	*	3	19
	Indirect Uses-Boiler Fuel		2	0	0	*	0	0	
	Conventional Boiler Use		2	0	0	*	0	0	
	CHP and/or Cogeneration Process		0	0	0	0	0	0	
	Direct Uses-Total Process		1,294	0	*	17	*	3	
	Process Heating		363	0	*	17	*	3	
	Process Cooling and Refrigeration		30	0	0	0	0	0	
	Machine Drive		885	0	*	1	*	0	
	Electro-Chemical Processes		0						
	Other Process Use		15	0	*	0	0	0	
	Direct Uses-Total Nonprocess		89	0	*	*	*	0	
	Facility HVAC (g)		48	0	0	*	*	0	
			30	U	U			U	
	Facility Lighting		30		-			-	

				_	_			_	,
	Other Facility Support		11	0	0	*	*	0	
	Onsite Transportation		*		*	0	*		P
	Conventional Electricity Generation		 	0	0	0	0	0	/
	Other Nonprocess Use		*	0	0	0	*	0	/
	End Use Not Reported	19	O	0	0	0	0	0	19
327420	Gypsum				·				
	TOTAL FUEL CONSUMPTION	59	1,541	0	*	50	*	0	*
	Indirect Uses-Boiler Fuel		4	0	0	1	0	0	
	Conventional Boiler Use		4	0	0	*	0	0	
	CHP and/or Cogeneration Process		0	0	0	1	0	0	
	Direct Uses-Total Process		1,314	0	*	48	0	0	
	Process Heating		86	0	*	47	0	0	
	Process Cooling and Refrigeration		25	0	0	*	0	0	
	Machine Drive		1,201	0	*	1	0	0	
	Electro-Chemical Processes		0						
	Other Process Use		Q	0	0	0	0	0	
	Direct Uses-Total Nonprocess		195	0	*	1	*	0	
	Facility HVAC (g)		71	0	*	1	*	0	
	Facility Lighting		103						
	Other Facility Support		15	0	*	*	0	0	
	Onsite Transportation		6		*	*	*		
	Conventional Electricity Generation			0	*	0	0	0	
	Other Nonprocess Use		*	0	*	0	*	0	
	End Use Not Reported	*	28	0	0	*	*	0	*
327993	Mineral Wool								
	TOTAL FUEL CONSUMPTION	33	3,110	0	*	21	*	*	*
	Indirect Uses-Boiler Fuel		1	0	0	*	0	0	
	Conventional Boiler Use		1	0	0	*	0	0	
	CHP and/or Cogeneration Process		0	0	0	*	0	0	
	Direct Uses-Total Process		2,703	0	*	19	*	*	
	Process Heating		1,036	0	*	18	*	*	
	Process Cooling and Refrigeration		159	0	0		0	0	-
	Machine Drive		1,356	0	*	*	*	0	- -
	Electro-Chemical Processes		8						
	Other Process Use		144	0	*	*	0	0	
	Direct Uses-Total Nonprocess		406	0	*	2	*	0	
	Facility HVAC (g)		147	0	*	1	*	0	
	Facility Lighting		199						
	Other Facility Support		45	0	*	*	0	0	
	Onsite Transportation		2		*	*	*		

	Conventional Electricity Generation			0	*	*	0	0	
	Other Nonprocess Use		13	0	*	0	0	0	
	End Use Not Reported	*	*	0	0	0	0	0	*
331	PRIMARY METALS								
	TOTAL FUEL CONSUMPTION	1,588	112,848	*	1	616	1	1	527
	Indirect Uses-Boiler Fuel		463	*	*	65	*	0	
	Conventional Boiler Use		463	*	*	20	*	0	
	CHP and/or Cogeneration Process		0	*	*	45	*	0	
	Direct Uses-Total Process		102,395	*	*	504	*	1	
	Process Heating		37,456	0	*	462	*	*	
	Process Cooling and Refrigeration		3,179	0	*	3	*	0	
	Machine Drive		33,044	*	*	5	*	0	
	Electro-Chemical Processes		23,332						
	Other Process Use		5,384	0	*	35	*	1	
	Direct Uses-Total Nonprocess		9,697	0	1	44	1	0	
	Facility HVAC (g)		4,017	0	*	38	*	0	
	Facility Lighting		3,972						
	Other Facility Support		1,277	0	*	3	*	0	
	Onsite Transportation		152		1	*	*		
	Conventional Electricity Generation			0	*	*	*	0	
	Other Nonprocess Use		278	0	*	2	*	0	
	End Use Not Reported	531	293	0	0	2	*	0	527
331110	Iron and Steel Mills and Ferroalloys								
	TOTAL FUEL CONSUMPTION	1,141	55,633	*	1	396	*	1	509
	Indirect Uses-Boiler Fuel		145	*	*	40	*	0	
	Conventional Boiler Use		145	*	0	16	0	0	
	CHP and/or Cogeneration Process		0	*	*	24	*	0	
	Direct Uses-Total Process		51,837	0	*	337	*	1	
				0	*	303	*	*	
	Process Hearing		20.329				*	0	
	Process Heating Process Cooling and Refrigeration		26,329 1,472	0	0	3			
	Process Cooling and Refrigeration		1,472	0	0	3	*	0	
	Process Cooling and Refrigeration Machine Drive		1,472 17,892				*	0 	
	Process Cooling and Refrigeration Machine Drive Electro-Chemical Processes		1,472 17,892 2,787	0		1	* *	0 1	
	Process Cooling and Refrigeration Machine Drive Electro-Chemical Processes Other Process Use		1,472 17,892 2,787 3,357	0	* *	1 30	* *	 1	
	Process Cooling and Refrigeration Machine Drive Electro-Chemical Processes Other Process Use Direct Uses-Total Nonprocess		1,472 17,892 2,787 3,357 3,640	0 0 0		1 30 19	******	 1 0	
	Process Cooling and Refrigeration Machine Drive Electro-Chemical Processes Other Process Use Direct Uses-Total Nonprocess Facility HVAC (g)		1,472 17,892 2,787 3,357 3,640 1,403	0 0 0	* * 1	1 30	*	1 0 0	-
	Process Cooling and Refrigeration Machine Drive Electro-Chemical Processes Other Process Use Direct Uses-Total Nonprocess Facility HVAC (g) Facility Lighting		1,472 17,892 2,787 3,357 3,640 1,403 1,673	0 0 0	* * 1	1 30 19 15	**	 1 0 0	
	Process Cooling and Refrigeration Machine Drive Electro-Chemical Processes Other Process Use Direct Uses-Total Nonprocess Facility HVAC (g) Facility Lighting Other Facility Support		1,472 17,892 2,787 3,357 3,640 1,403 1,673 418	0 0 0 0	* * 1 *	1 30 19 15	*	1 0 0	
	Process Cooling and Refrigeration Machine Drive Electro-Chemical Processes Other Process Use Direct Uses-Total Nonprocess Facility HVAC (g) Facility Lighting		1,472 17,892 2,787 3,357 3,640 1,403 1,673	0 0 0	* 1	1 30 19 15	*	 1 0 0	

Purchased Steel PITION 51 6,915 0 4 24 4 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	509
uel - 56 0 1 3 0 0 1 0 0 0 1 0 0 0 1 0 0 0 1 0	
Second S	2
See	
ress - 5,859 0 * 18 * * Refineration - 1,585 0 * 1,72 * 0 Refineration - 620 0 0 * 1 0 cesses - 531 - - - - - seeses - 94 0 * 1 * 0 sprocess - 421 0 * 3 * 0 sprocess - 421 0 * 3 * 0 tr - 427 - - - - - tr - 119 - 0 * 0 - tr - 13 0 0 0 0 - tr 2 2 0 0 1 1 0 0 tr 3 0 <td></td>	
1,585 0	
Refrigeration - 620 0 0 • 0 • 0 0 0 0 0 0 0 0 0 0 0 0 0 0	- -
- 3,030 0	
Seese	
process	
Process - 988 0 • 3 • 3 • 0 - 421 0 • 3 • 3 • 0 - 421 0 • 3 • 3 • 0 - 427	
	
	
th 118 0 * * 0 int 19 * 0 * * 0 see 3 0 0 0 * 0 see 3 0 0 0 * 0 curs curs 10 0 1 1 0 curs <td< td=""><td>-</td></td<>	-
Prior 19	- -
Prior Prio	-
See 3 0 0 0 * 0 d 2 Q 0 0 0 * 0 um Description 207 26,260 0 * 112 * 0 uel 162 0 * 14 * 0 Use 162 0 0 1 * 0 tess 23,825 0 * 87 0 0 cess 314 0 0 * 87 0 cesses 16,489	- -
### PITION 207 26,260 0 * 112 * 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
PTION 207 26,260 0 1112 1 0 0 1 1 1 0 0 1 1 0 1 1 0 1 1 0 0 1 1 0 1 0 1 1 0 1 1 0 1 0 1 1 0 1 0 1 1 0 1 0 1 1 0 1 0 1 1 0 1 0 1 1 0 1 0 1 1 0 1 0 1 1 0 1 0 1 0 1 1 0 1	
PPTION 207 26,260 0	2
PPTION 207 26,260 0	
uel 162 0 * 14 * 0 Jse 162 0 0 1 * 0 ation Process 0 0 * 13 * 0 cess 23,825 0 * 89 * 0 Refrigeration 1,064 0 * 87 * 0 Refrigeration 314 0 0 * 87 * 0 Refrigeration 5,761 0 * 1 * 0 cesses 16,489 cesses 197 0 * 8 * 0 cess	
uel 162 0 * 14 * 0 Jse 162 0 0 1 * 0 ation Process 0 0 * 13 * 0 cess 23,825 0 * 89 * 0 Refrigeration 1,064 0 * 87 * 0 Refrigeration 314 0 0 * 87 * 0 Refrigeration 5,761 0 * 1 * 0 cesses 16,489 cesses 197 0 * 8 * 0 cess	
uel 162 0 * 14 * 0 Jse 162 0 0 1 * 0 ation Process 0 0 * 13 * 0 cess 23,825 0 * 89 * 0 Refrigeration 1,064 0 * 87 * 0 Refrigeration 314 0 0 * 87 * 0 Refrigeration 5,761 0 * 1 * 0 cesses 16,489 cesses 197 0 * 8 * 0 cess	
Jse 162 0 0 1 * 0 action Process 0 0 * 13 * 0 cess 23,825 0 * 89 * 0 Refrigeration 1,064 0 * 87 * 0 Cesses 5,761 0 * 1 * 0 Cesses 16,489 Approcess 197 0 * 2 * 0 Approcess 197 0 * 2 * 0 Approcess 713 0 * 8 * 0 Approcess 879 At 464 0 * 1 * 0 At 15 * * 1 * 0 At 155 0 * 0 * 0 *	*
Pation Process 0 0 * 13 * 0 23,825 0 * 89 * 0 1,064 0 * 87 * 0 314 0 0 * 1 * 0 5,761 0 * 1 * 0 5,761 0 * 1 * 0 16,489 197 0 * 2 * 0 197 0 * 2 * 0 197 0 * 8 * 0 197 0 * 8 * 0 197 0 * 8 * 0 197 0 * 8 * 0 197 0 * 8 * 0 197 0 * 8 * 0 155 15 15 15 15	
reess 23,825 0 * 89 * 0 1,064 0 * 87 * 0 Refrigeration 314 0 0 * 1 * 0 5,761 0 * 1 * 0 5,761 0 * 1 * 0 5,761 0 * 1 * 0 1970 0 * 1 * 0 1970 0 * 2 * 0 1970 0 * 2 * 0 1970 0 * 8 * 0 713 0 * 8 * 0 713 0 * 8 * 0 713 0 * 8 * 0 713 0 * 8 * 0 155 0 0 * 0 * 1 * 0 155 0 0 * 0 * 0	
cess 23,825 0 * 89 * 0 Refrigeration 1,064 0 * 87 * 0 Refrigeration 314 0 0 * * 0 Cesses 5,761 0 * 1 * 0 Cesses 16,489 Approcess 197 0 * 2 * 0 Approcess 2,225 0 * 8 * 0 Approcess 713 0 * 8 * 0 Approcess 879 <	
Compose Comp	
Refrigeration 314 0 0 * * 0 cesses 5,761 0 * 1 * 0 cesses 16,489 <t< td=""><td></td></t<>	
5,761 0 * 1 * 0 cesses 16,489 197 0 * 2 * 0 sprocess 2,225 0 * 8 * 0 sprocess 713 0 * 8 * 0 713 0 * 8 * 0 879 t 464 0 * 1 * 0 n 155 * * * * city Generation 0 0 0 * 0 * 0	
cesses 16,489 <td></td>	
197 0 * 2 * 0 sprocess 2,225 0 * 8 * 0 713 0 * 8 * 0 713 0 * 8 * 0 879 t 464 0 * 1 * 0 n 155 * * * * city Generation 0 0 0 * 0 se 155 0 * 0	
process 2,225 0 * 8 * 0 713 0 * 8 * 0 713 0 * 8 * 0 713 0 * 879	
713 0 * 8 * 0 879 t 464 0 * 1 * 0 n 15 * * * city Generation 0 0 * 0 * 0 se 155 0 * 0 * 0	
879	
t 464 0 * 1 * 0 n 15 * * * * city Generation 0 0 * * 0 se 155 0 * 0 * 0	
n 15 * * * * 0 tity Generation 0 0 * 0 * 0 0 * 0 0 0 0 0 0 0 0 0	
city Generation 0 0 * * 0 se 155 0 * 0 * 0	
se 155 0 * 0 * 0	
·	*
d 	

331314	Secondary Smelting and Alloying of Aluminum								
	TOTAL FUEL CONSUMPTION	21	780	0	*	17	*	0	
	Indirect Uses-Boiler Fuel		*	0	0	*	0	0	
	Conventional Boiler Use		*	0	0	*	0	0	
	CHP and/or Cogeneration Process		0	0	0	*	0	0	
	Direct Uses-Total Process		650	0	*	17	*	0	
	Process Heating		118	0	0	16	*	0	
	Process Cooling and Refrigeration		16	0	0	*	0	0	
	Machine Drive		481	0	*	*	*	0	
	Electro-Chemical Processes		0						
	Other Process Use		35	0	0	*	*	0	
	Direct Uses-Total Nonprocess		129	0	*	1	*	0	
	Facility HVAC (g)		56	0	*	1	*	0	
	Facility Lighting		51						
	Other Facility Support		21	0	*	*	*	0	
	Onsite Transportation		1		*	0	*		
	Conventional Electricity Generation			0	0	0	0	0	
	Other Nonprocess Use		1	0	*	0	*	0	
	End Use Not Reported	*	0	0	0	0	*	0	
	TOTAL FUEL CONSUMPTION	73	5,377	0	*	52	*	0	
	Indirect Uses-Boiler Fuel		1	0	*	1	0	0	
	Conventional Boiler Use		1	0	0	*	0	0	
	CHP and/or Cogeneration Process		0	0	*	*	0	<u>0</u>	
	Direct Uses-Total Process		4,677	0	*	49	*	0	
	Process Heating		440	0	0	48	*	<u>0</u>	
	Process Cooling and Refrigeration		171	0	0	0	0	0	
	Machine Drive		3,927	0	*	*	*	0	
	Electro-Chemical Processes		9						
	Other Process Use		131	0	*	2	*	0	
	Direct Uses-Total Nonprocess		698	0	*	2	*	0	
	Facility HVAC (g)		251	0	0	2	0	0	
	Facility Lighting Other Facility Support		354			*			
	Other Facility Support		87	0	0		0 *	0	
	Onsite Transportation Conventional Electricity Congression		6			0			
	Conventional Electricity Generation			0	0 *	0	0 *	0	
	Other Nonprocess Use	*	0	0		0		0	
	End Use Not Reported		0	0	0	0	0	0	
331318	Other Aluminum Rolling, Drawing and Extruding								

	TOTAL FUEL CONSUMPTION	24	1,917	0	*	17	*	0	*
	Indirect Uses-Boiler Fuel		26	0	0	1	*	0	
	Conventional Boiler Use		26	0	0	*	*	0	
	CHP and/or Cogeneration Process		0	0	0	1	*	0	
	Direct Uses-Total Process		1,504	0	*	14	*	0	
	Process Heating		344	0	*	14	*	0	
	Process Cooling and Refrigeration		121	0	0	*	*	0	
	Machine Drive		964	0	0	*	*	0	
	Electro-Chemical Processes		44						
	Other Process Use		31	0	0	*	*	0	
	Direct Uses-Total Nonprocess		375	0	*	1	*	0	
	Facility HVAC (g)		134	0	*	1	*	0	
	Facility Lighting		188						
	Other Facility Support		35	0	0	*	*	0	/
	Onsite Transportation		8		*	*	*		
	Conventional Electricity Generation			0	0	*	0	0	
	Other Nonprocess Use		10	0	0	0	*	0	
	End Use Not Reported	*	12	0	0	*	*	0	* /
3314	Nonferrous Metals, except Aluminum								
	TOTAL FUEL CONSUMPTION	95	13,274	0	*	40	*	0	7
	Indirect Uses-Boiler Fuel		71	0	*	8	*	0	
	Conventional Boiler Use		71	0	0	3	*	0	
	CHP and/or Cogeneration Process		0	0	*	5	*	0	
	Direct Uses-Total Process		11,892	0	*	28	*	0	
	Process Heating		3,895	0	*	27	*	0	
	Process Cooling and Refrigeration		528	0	0	*	*	0	
	Machine Drive		2,935	0	*	*	*	0	
	Electro-Chemical Processes		3,422						
	Other Process Use		1,111	0	0	*	*	0	
	Direct Uses-Total Nonprocess		1,262	0	*	4	*	0	
	Facility HVAC (g)		675	0	*	4	*	0	
	Facility Lighting		440						
	Other Facility Support		114	0	*	*	*	0	
	Onsite Transportation		21		*	*	*		
	Conventional Electricity Generation			0	*	*	*	0	
	Other Nonprocess Use		12	0	*	*	*	0	
	End Use Not Reported	7	49	0	0	*	*	0	7
331410	Nonferrous Metal (except Aluminum) Smelting and Refining								
	TOTAL FUEL CONSUMPTION	44	7,887	0	*	15	*	0	1

	Indirect Uses-Boiler Fuel		1	0	*	5	*	0	
	Conventional Boiler Use		1	0	0	2	0	0	
	CHP and/or Cogeneration Process		0	0	*	3	*	0	
	Direct Uses-Total Process		7,483	0	*	9	*	0	
	Process Heating		2,271	0	*	8	*	0	
	Process Cooling and Refrigeration		387	0	0	*	0	0	
	Machine Drive		914	0	*	*	*	0	
	Electro-Chemical Processes		3,221						
	Other Process Use		690	0	0	*	*	0	
	Direct Uses-Total Nonprocess		403	0	*	1	*	0	
	Facility HVAC (g)		210	0	*	1	*	0	
	Facility Lighting		149						
	Other Facility Support		38	0	*	*	*	0	
	Onsite Transportation		5		*	*	*		
	Conventional Electricity Generation			0	*	*	0	0	
	Other Nonprocess Use		0	0	*	0	*	0	
	End Use Not Reported	1	1	0	0	0	*	0	1
3315	Foundries								
				*				*	
	TOTAL FUEL CONSUMPTION	92	10,766			43	*		10
	Indirect Uses-Boiler Fuel		29	0	·	1 *	* ••••••••••••••••••••••••••••••••••••	0	
	Conventional Boiler Use		29	0			*	0	
	CHP and/or Cogeneration Process		0	0 *	·	1	* ••••••••••••••••••••••••••••••••••••	0	
	Direct Uses-Total Process		8,982		·*	32	* ••••••••••••••••••••••••••••••••••••	*	
	Process Heating		4,583	0	·	28	**************************************		
	Process Cooling and Refrigeration		245	0 *	·		**************************************	0	
	Machine Drive	-	3,426			2		0	
	Electro-Chemical Processes	-	102		 		 	*	
	Other Process Use	-	625	0	*	2	*		
	Direct Uses-Total Nonprocess	-	1,582	0 0	*	10 9	*	0	
	Facility HVAC (g)	- -	805			9		0	
	Facility Lighting	-	554 163	 0	*	*	*	0	
	Other Facility Support	-		U	*	*	*		
	Onsite Transportation Conventional Electricity Generation	-	31		*	*	0	0	
	Other Nonprocess Use		 29	0 0	*	*	*	0	
	End Use Not Reported	11	173	0	0	*	*	0	10
	Liiu ose Not Reporteu		1/3						10
331511	Iron Foundries								
	TOTAL FUEL CONSUMPTION	40	5,197	0	*	12	*	*	10
	Indirect Uses-Boiler Fuel	40	2	0	*	*	*	0	10
	Conventional Boiler Use		2	0	*	*	*	0	
	CONVENTIONAL BOILET USE	-	Z	U			······	U	

	CHP and/or Cogeneration Process		0	0	*	*	0	0	
	Direct Uses-Total Process		4,448	0	*	7	*	*	
	Process Heating		2,415	0	*	6	*	0	
	Process Cooling and Refrigeration		64	0	0	*	*	0	
	Machine Drive		1,467	0	*	1	*	0	
	Electro-Chemical Processes		Q						
	Other Process Use		416	0	0	*	*	*	
	Direct Uses-Total Nonprocess		685	0	*	5	*	0	
	Facility HVAC (g)		337	0	*	4	*	0	
	Facility Lighting		248						
	Other Facility Support		80	0	0	*	*	0	
	Onsite Transportation		13		*	*	*		
	Conventional Electricity Generation			0	*	0	0	0	
	Other Nonprocess Use		7	0	*	*	*	0	
	End Use Not Reported	10	61	0	0	*	*	0	10
	Lilu Ose Not Reported	10	01					-	10
331523	Nonferrous Metal Die-Casting Foundries								
	TOTAL FUEL CONSUMPTION	22	2,078	*	*	14	*	0	*
	Indirect Uses-Boiler Fuel		13	0	*	*	*	0	
	Conventional Boiler Use		13	0	*	*	*	0	
	CHP and/or Cogeneration Process		0	0	*	*	*	0	
	Direct Uses-Total Process		1,637	*	*	11	*	0	
	Process Heating		552	0	*	10	*	0	
	Process Cooling and Refrigeration		52	0	*	*	*	0	
	Machine Drive		951	*	*	1	*	0	
	Electro-Chemical Processes		2						
	Other Process Use		79	0	*	*	*	0	
	Direct Uses-Total Nonprocess		356	0	*	2	*	0	
	Facility HVAC (g)		177	0	*	2	*	0	
	Facility Lighting		123						
	Other Facility Support		36	0	*	*	*	0	
	Onsite Transportation		12		*	*	*		
	Conventional Electricity Generation			0	*	*	0	0	
	Other Nonprocess Use		7	0	*	0	0	0	
	End Use Not Reported	1	72	0	0	*	*	0	*
331524	Aluminum Foundries, except Die-Casting								
	TOTAL FUEL CONSUMPTION	9	788	0	*	6	*	0	*
	Indirect Uses-Boiler Fuel		2	0	0	*	*	0	
	Conventional Boiler Use		2	0	0	*	*	0	
	CHP and/or Cogeneration Process		0	0	0	*	*	0	
	Direct Uses-Total Process		642	0	*	5	*	0	
						·			

	Decree Heating		222	2	¥		Ψ.	6	
	Process Heating		223	0	*	4	* •	0	
	Process Cooling and Refrigeration		34	0	0 *	т 	* •	0	-
	Machine Drive		373	0			·	0	
	Electro-Chemical Processes		8				 *		
	Other Process Use		4	0		*	τ 	0	
	Direct Uses-Total Nonprocess		130	0	* 	1	* •	0	-
	Facility HVAC (g)		72	0		1	· · · · · · · · · · · · · · · · · · ·	0	
	Facility Lighting		43			 	 		-
	Other Facility Support		13	0			*	0	-
	Onsite Transportation		2		-		*		-
	Conventional Electricity Generation		 	0	0	*	0	0	-
	Other Nonprocess Use	 ,t.	*	0		0	0	0	
	End Use Not Reported	*	14	0	0	т	*	0	*
222	FARRICATED METAL RECOLUCTS								
332	FABRICATED METAL PRODUCTS								
	TOTAL FILE CONCUMPTION	254	26 201		*	120	1	*	
	TOTAL FUEL CONSUMPTION Indirect Uses-Boiler Fuel	254	36,281 209	0	*	120 13	*	0	Z
				0			*	0	-
	Conventional Boiler Use		209 0	0	0 *	Q 11	*	0	
	CHP and/or Cogeneration Process			0	*	11 71	*	0	
	Direct Uses-Total Process		24,607	0		67	*	0	
	Process Heating Process Cooling and Refrigeration		5,846	0	0	• b/ *	0	0	
			1,536		v		*		
	Machine Drive		15,037	0		Q		0	
	Electro-Chemical Processes		Q 560	0	 *		*		
	Other Process Use			0	*	Q 32	1	0	
	Direct Uses-Total Nonprocess Facility HVAC (g)		10,046	0	*	29	*	*	
	Facility HVAC (g) Facility Lighting		5,014			29 			
	Other Facility Support		3,853 838	0	*		*		
					*	2	*	0	
	Onsite Transportation		261		*	*			
	Conventional Electricity Generation		 	0	*	· · · · · · · · · · · · · · · · · · ·	0 *	0	
	Other Nonprocess Use End Use Not Reported		80 Q	0	0	0 Q	*	0	2
	LIN OSE NOL REPORTED	11	u	U	U	<u>u</u>	·	U	Z
333	MACHINERY								
	TO CONTENT								
	TOTAL FUEL CONSUMPTION	146	23,556	*	*	57	1	*	1
	Indirect Uses-Boiler Fuel		241	*	*	7	*	0	
	Conventional Boiler Use		241	0	0	Q	0	0	
	CHP and/or Cogeneration Process		0	*	*	5	*	0	
	Direct Uses-Total Process		14,476	0	*	24	*	0	
	Process Heating		1,026	0	*	19	*	0	
	Process Cooling and Refrigeration		885	0	0	*	0	0	

1			44.615	•	*	2		•	
	Machine Drive		11,919	0	*	3	*	0	
1	Electro-Chemical Processes		Q		*		 •		
	Other Process Use		395	0 *	*	2	*	0	- -
	Direct Uses-Total Nonprocess		7,884	* *	*	26	·	* *	
	Facility HVAC (g)		3,905	т		24	τ	T	- -
	Facility Lighting		2,784				 •		- -
	Other Facility Support		997	0	0 *	<u>1</u> *	т .i.	0	-
	Onsite Transportation		173		* 	т 	*		-
	Conventional Electricity Generation			0	*	*	*	0	
	Other Nonprocess Use		Q	0		т 	*	0	-
	End Use Not Reported	6	Q	0	0	*	*	0	1
334	COMPUTER AND ELECTRONIC PRODUCTS								
	TOTAL FUEL CONSUMPTION	107	22,221	*	*	29	*	0	*
	Indirect Uses-Boiler Fuel	10/	183	*	*	10	*	0	
	Conventional Boiler Use		183	0	*	7	*	0	
	CONVENTIONAL BOILEY USE CHP and/or Cogeneration Process		183	*	*	3	0	0	
	Direct Uses-Total Process		12,433	0	*	2	*	0	
	Process Heating		2,119	0	*	1	*	0	
	Process Cooling and Refrigeration		3,564	0	0	* T	0	0	
	Machine Drive		4,160	0	*	Q	*	0	
	Electro-Chemical Processes		539	U				U	
	Other Process Use		2,050	0	*	 1	0	0	
	Direct Uses-Total Nonprocess		2,050 8,591	*	*	16	*	0	
	Facility HVAC (g)		5,495	*	*	15	*	0	
	Facility HVAC (g)		1,890			12			
	Other Facility Support		823	0	*	1	*	0	
	Onsite Transportation		78		*	* T	*		
	Conventional Electricity Generation			0	*	*	0	0	
	Other Nonprocess Use		306	0	*	1	*	0	
	End Use Not Reported	4	1,015	0	0	*	*	0	*
								J	
334413	Semiconductors and Related Devices								
	TOTAL FUEL CONSUMPTION	53	11,612	*	*	13	*	0	*
	Indirect Uses-Boiler Fuel		54	*	*	7	*	0	
	Conventional Boiler Use		54	0	*	5	*	0	
	CHP and/or Cogeneration Process		0	*	*	2	0	0	
	Direct Uses-Total Process		7,379	0	*	2	*	0	
	Process Heating		1,434	0	0	1	*	0	
	Process Cooling and Refrigeration		1,723	0	0	0	0	0	
	Machine Drive		2,223	0	*	0	0	0	
	Electro-Chemical Processes		333						

	Other Process Use		1,667	0	*	1	0	0	
	Direct Uses-Total Nonprocess		3,849	0	*	4	*	0	
	Facility HVAC (g)		2,707	0	*	 4	*	0	
	Facility Lighting		512						
	Other Facility Support		314	0	*	*	*	0	
	Onsite Transportation		14		*	0	*		
	Conventional Electricity Generation			0	*	0	0	0	
	Other Nonprocess Use		301	0	*	1	*	0	
	End Use Not Reported	1	330	0	0	*	*	0	*
	Liiu Ose Not Nepoiteu								
335	ELEC. EQUIP., APPLIANCES, COMPONENTS								
	TOTAL FUEL CONSUMPTION	77	11,045	*	*	35	*	0	Q
	Indirect Uses-Boiler Fuel		Q	0	*	6	*	0	
	Conventional Boiler Use		Q	0	*	2	0	0	
	CHP and/or Cogeneration Process		0	0	0	Q	*	0	
	Direct Uses-Total Process		7,160	0	*	19	*	0	
	Process Heating		2,254	0	0	17	*	0	
	Process Cooling and Refrigeration		650	0	0	*	0	0	
	Machine Drive		3,675	0	*	*	0	0	
	Electro-Chemical Processes		141						
	Other Process Use		441	0	*	Q	*	0	
	Direct Uses-Total Nonprocess		3,457	*	*	10	*	0	
	Facility HVAC (g)		1,949	0	0	8	*	0	
	Facility Lighting		981						
	Other Facility Support		332	0	0	1	0	0	
	Onsite Transportation		132		*	*	*		
	Conventional Electricity Generation			0	*	*	0	0	
	Other Nonprocess Use		Q	*	*	*	*	0	
	End Use Not Reported	3	Q	0	0	*	*	0	Q
336	TRANSPORTATION EQUIPMENT								
	TRANSFORTATION EQUITATION								
	TOTAL FUEL CONSUMPTION	345	50,479	*	1	151	1	0	7
	Indirect Uses-Boiler Fuel		352	*	*	24	*	0	
	Conventional Boiler Use		352	*	*	13	*	0	
	CHP and/or Cogeneration Process		0	*	*	11	*	0	
	Direct Uses-Total Process		32,444	*	*	66	*	0	
	Process Heating		4,584	0	0	61	*	0	
	Process Cooling and Refrigeration		3,361	0	0	2	*	0	
	Machine Drive		22,124	0	*	1	*	0	
	Electro-Chemical Processes		350						
	Other Process Use		2,024	*	*	3	*	0	
	Direct Uses-Total Nonprocess		17,335	*	*	60	1	0	

									,
	Facility HVAC (g)		9,008	0	*	56	*	0	
	Facility Lighting		5,843						
	Other Facility Support		1,482	0	*	2	*	0	r
	Onsite Transportation		577		*	*	1		
	Conventional Electricity Generation			0	*	*	*	0	r
	Other Nonprocess Use		425	*	*	1	*	0	/
	End Use Not Reported	10	Q	0	0	1	*	0	7
336111	Automobiles								
	TOTAL FUEL CONSUMPTION	34	4,026	0	*	18	*	0	2
	Indirect Uses-Boiler Fuel		48	0	0	1	0	0	7
	Conventional Boiler Use		48	0	0	1	0	0	7
	CHP and/or Cogeneration Process		0	0	0	*	0	0	7
	Direct Uses-Total Process		2,599	0	*	12	*	0	<i>'</i>
	Process Heating		223	0	0	11	*	0	
	Process Cooling and Refrigeration		229	0	0	1	*	0	
	Machine Drive		1,958	0	*	*	*	0	
	Electro-Chemical Processes		48						
	Other Process Use		139	0	*	1	*	0	
	Direct Uses-Total Nonprocess		1,380	0	*	4	*	0	
	Facility HVAC (g)		785	0	0	4	*	0	
	Facility Lighting		415						
	Other Facility Support		121	0	0	*	*	0	
	Onsite Transportation		53		*	0	*		
	Conventional Electricity Generation			0	*	*	*	0	
	Other Nonprocess Use		6	0	*	0	*	0	
	End Use Not Reported	2	*	0	0	*	*	0	2
336112	Light Trucks and Utility Vehicles								
	TOTAL FUEL CONSUMPTION	41	4,238	0	*	24	*	0	1
	Indirect Uses-Boiler Fuel		153	0	0	4	*	0	
	Conventional Boiler Use		153	0	0	2	*	0	
	CHP and/or Cogeneration Process		0	0	0	2	0	0	
	Direct Uses-Total Process		2,839	0	*	13	*	0	
	Process Heating		151	0	0	13	*	0	
	Process Cooling and Refrigeration		350	0	0	*	0	0	
	Machine Drive		2,119	0	*	*	*	0	
	Electro-Chemical Processes		38						
	Other Process Use		181	0	0	1	*	0	
	Direct Uses-Total Nonprocess		1,246	0	*	7	*	0	
	Facility HVAC (g)		674	0	0	6	*	0	
	Facility Lighting		446						
	1 delity Eighting		770						

	Other Facility Support		57	0	*	*	0	0	
	Onsite Transportation		67		*	*	*		
	Conventional Electricity Generation			0	*	*	0	0	
	Other Nonprocess Use		2	0	*	0	0	0	
	End Use Not Reported	1	0	0	0	*	*	0	1
3364	Aerospace Products								
	TOTAL FUEL CONSUMPTION	64	9,678	*	*	26	*	0	4
	Indirect Uses-Boiler Fuel		88	*	*	12	*	0	
	Conventional Boiler Use		88	0	*	7	*	0	
	CHP and/or Cogeneration Process		0	*	*	4	*	0	
	Direct Uses-Total Process		4,614	0	*	5	*	0	
	Process Heating		1,066	0	0	4	*	0	
	Process Cooling and Refrigeration		783	0	0	*	*	0	
	Machine Drive		2,296	0	*	1	*	0	
	Electro-Chemical Processes		105						
	Other Process Use		365	0	*	*	*	0	
	Direct Uses-Total Nonprocess		4,892	0	*	9	*	0	
	Facility HVAC (g)		2,803	0	*	7	*	0	
	Facility Lighting		1,465						
	Other Facility Support		405	0	*	1	*	0	
	Onsite Transportation		81		*	*	*		
	Conventional Electricity Generation			0	*	*	*	0	
	Other Nonprocess Use		138	0	*	1	*	0	
	End Use Not Reported	5	83	0	0	Q	*	0	4
225444	A								
336411	Aircraft								
	TOTAL FUEL CONSUMPTION	17	2,722	0	*	6	*	0	2
	Indirect Uses-Boiler Fuel		28	0	*	2	*	0	
	Conventional Boiler Use		28	0	*	2	*	0	
	CHP and/or Cogeneration Process		0	0	0	*	0	0	
	Direct Uses-Total Process		850	0	*	1	0	0	
	Process Heating		206	0	0	1	0	0	
	Process Cooling and Refrigeration		100	0	0	*	0	0	
	Machine Drive		506	0	*	*	0	0	
	Electro-Chemical Processes		25						
	Other Process Use		13	0	*	*	0	0	
	Direct Uses-Total Nonprocess		1,814	0	*	2	*	0	
	Facility HVAC (g)		1,206	0	0	2	*	0	
	Facility Lighting		449						
	Other Facility Support		140	0	*	*	0	0	
	Onsite Transportation		19		*	*	*		

	Conventional Flactuisity Consusting			0	*	0	0	0	
	Conventional Electricity Generation			0		0	0	0	
	Other Nonprocess Use		·····	0	·	0	0	0	
	End Use Not Reported	2	30	0	0	0		0	2
337	FURNITURE AND RELATED PRODUCTS								
	TOTAL FUEL CONSUMPTION	37	4,672	0	*	15	*	*	5
	Indirect Uses-Boiler Fuel		32	0	*	1	*	0	
	Conventional Boiler Use		32	0	0	*	*	0	
	CHP and/or Cogeneration Process		0	0	*	Q	*	0	
	Direct Uses-Total Process		2,809	0	*	7	*	*	
	Process Heating		230	0	0	6	*	*	
	Process Cooling and Refrigeration		69	0	0	*	*	0	
	Machine Drive		2,474	0	*	Q	*	0	
	Electro-Chemical Processes		Q						
	Other Process Use		28	0	0	*	*	0	
	Direct Uses-Total Nonprocess		1,639	0	*	7	*	*	
	Facility HVAC (g)		767	0	*	7	*	*	- -
	Facility Lighting		586						
	Other Facility Support		176	0	0	Q	*	0	
	Onsite Transportation		83		*	*	*		-
	Conventional Electricity Generation			0	*	*	*	0	-
	Other Nonprocess Use		Q	0	*	0	*	0	
	End Use Not Reported	6	Q	0	0	*	*	0	5
339	MISCELLANEOUS								
	WINGLELANCOUS								
	TOTAL FUEL CONSUMPTION	61	9,571	0	*	24	*	*	1
	Indirect Uses-Boiler Fuel		91	0	*	3	*	0	
	Conventional Boiler Use		91	0	0	1	*	0	
	CHP and/or Cogeneration Process		0	0	*	2	*	0	
	Direct Uses-Total Process		4,865	0	*	12	*	*	
	Process Heating		519	0	*	9	*	*	
	Process Cooling and Refrigeration		553	0	0	*	0	0	
	Machine Drive		3,150	0	*	1	*	0	
	Electro-Chemical Processes		Q						
	Other Process Use		Q	0	0	Q	0	0	
	Direct Uses-Total Nonprocess		4,600	0	*	10	*	0	
	Facility HVAC (g)		2,466	0	*	8	*	0	
	Facility Lighting		1,214						
	Other Facility Support		389	0	*	*	*	0	
	Onsite Transportation		102		*	*	*		
	Conventional Electricity Generation			0	*	*	0	0	
	Other Nonprocess Use		Q	0	*	Q	*	0	

End Use Not Reported	1	16	0	0	*	*	0	1

- (a) The Bureau of the Census classifies establishments using the 2017 North American Industry Classification System (NAICS).
- (b) Net Electricity is obtained by summing purchases, transfers in, and generation from noncombustible renewable resources, minus quantities sold and transferred out. It does not include electricity inputs from consite cogeneration or generation from combustible fuels because that energy has already been included as generating fuel (for example, coal).
- (c) Distillate Fuel Oil includes Nos. 1, 2, and 4 fuel oils and Nos. 1, 2, and 4 diesel fuels.
- (d) Natural Gas includes natural gas obtained from utilities, local distribution companies, and any other supplier(s), such as independent gas producers, gas brokers, marketers, and any marketing subsidiaries of utilities.
- (e) Hydrocarbon Gas Liquids (HGL) include ethane, ethylene, propane, propylene, normal butane, butylene, ethane-propane mixtures, propane-butane mixtures, and isobutane produced at refineries or natural gas processing plants, including plants that fractionate raw Natural Gas Liquids (NGL).
- (f) Other includes net steam (the sum of purchases, generation from renewables, and net transfers), and other energy that respondents indicated was used to produce heat and power.
- (g) Facility Heating, Ventilation, and Air Conditioning (Facility HVAC) excludes steam and hot water.
- * Estimate less than 0.5.
- D=Withheld to avoid disclosing data for individual establishments.
- Q=Withheld because Relative Standard Error (RSE) is greater than 50 percent.

NA=Not available.

- -- Estimation is not applicable.
- S=Negative value.

Notes: Totals may not equal sum of components because of independent rounding. The estimates presented in this table are for the total consumption of energy (formerly total inputs of energy) for the production of heat, power, and electricity generation, regardless of where the energy was produced. Specifically, the estimates include the quantities of energy that were originally produced offsite and purchased by or transferred to the establishment, plus those that were produced onsite from other energy or input materials not classified as energy, or were extracted from captive (onsite) mines or wells. Allocations to specific end uses are made on the basis of reasonable approximations by respondents.

Source: U.S. Energy Information Administration, Office of Energy Demand and Integrated Statistics, Form EIA-846, 2018 Manufacturing Energy Consumption Survey.

The Census Bureau has reviewed this data product for unauthorized disclosure of confidential information and has approved the disclosure avoidance practices applied (Approval ID: CBDRB-FY20-260).

RSE Table 5.1 Relative Standard Errors for Table 5.1;

Unit: Percents.

					Distillate Fuel Oil			Coal	
NAICS			Net	Residual	and	Natural	HGL (excluding	(excluding Coal	(0
Code(a)	End Use	Total	Electricity(b)	Fuel Oil	Diesel Fuel(c)	Gas(d)	natural gasoline)(e)	Coke and Breeze)	Other(f)
		Total United St	ates						
311 - 339	ALL MANUFACTURING INDUSTRIES								
	TOTAL FUEL CONSUMPTION	0.7	1.8	2.5	7.9	0.9	3.9	3.3	0.8
	Indirect Uses-Boiler Fuel		4.4	0.7	7.0	1.0	9.2	0.2	
	Conventional Boiler Use		4.4	1.3	17.8	1.7	12.1	1.8	
	CHP and/or Cogeneration Process		Х	0.2	4.2	1.2	14.0	0.1	
	Direct Uses-Total Process		1.5	6.3	16.3	1.3	D	5.9	
	Process Heating		2.6	6.3	29.1	1.4	6.7	0.2	
	Process Cooling and Refrigeration		4.7	0.0	8.5	4.8	20.0	4.9	
	Machine Drive		1.8	72.5	14.9	3.4	40.8	0.0	
	Electro-Chemical Processes		2.6						
	Other Process Use		5.1	90.0	46.3	3.3	D	31.0	
	Direct Uses-Total Nonprocess		4.0	30.1	6.5	3.3	D	17.7	
	Facility HVAC (g)		4.0	7.4	29.2	3.9	D	27.6	
	Facility Lighting		5.6						
	Other Facility Support		2.9	X	49.1	6.2	19.2	0.0	
	Onsite Transportation		5.0		6.3	13.4	4.6		
	Conventional Electricity Generation			0.0	23.8	1.3	46.3	0.0	
	Other Nonprocess Use		19.7	61.2	24.7	12.1	15.0	X	
	End Use Not Reported	0.8	13.1	0.0	12.7	8.5	21.8	X	0.8
311	FOOD								
	TOTAL FUEL CONSUMPTION	5.0	11.4	2.2	29.3	4.5	18.4	0.0	7.1
	Indirect Uses-Boiler Fuel		8.6	3.1	24.3	4.0	16.2	0.0	
	Conventional Boiler Use		8.6	5.7	40.0	6.2	20.1	0.0	
	CHP and/or Cogeneration Process		X	0.0	11.1	5.3	25.1	0.0	
	Direct Uses-Total Process		8.5	1.9	57.3	7.7	45.8	0.0	
	Process Heating		11.5	2.2	84.4	8.6	54.6	0.0	
	Process Cooling and Refrigeration		10.5	0.0	9.0	6.8	11.7	X	
	Machine Drive		9.6	0.0	19.0	28.4	53.2	X	<u></u>

	Electro-Chemical Processes		29.8						
	Other Process Use		14.1	X	64.3	25.0	58.0	Х	
	Direct Uses-Total Nonprocess		23.9	0.3	17.5	11.4	13.9	0.0	
	Facility HVAC (g)		25.5	0.3	69.7	15.6	29.0	Х	
	Facility Lighting		30.4						
	Other Facility Support		6.3	Х	77.6	12.0	47.4	Х	
	Onsite Transportation		6.9		9.3	11.3	9.7		
	Conventional Electricity Generation			X	31.1	8.6	87.8	0.0	
	Other Nonprocess Use		14.5	Х	28.9	3.7	69.2	Х	
	End Use Not Reported	6.8	31.3	X	X	19.4	30.0	Х	7.1
3112	Grain and Oilseed Milling								
	TOTAL FUEL CONSUMPTION	2.4	1.9	15.8	15.6	3.6	15.0	0.0	3.2
	Indirect Uses-Boiler Fuel		2.7	X	74.0	2.7	52.9	0.0	
	Conventional Boiler Use		2.7	X	0.0	6.3	X	0.0	
	CHP and/or Cogeneration Process		X	X	82.2	2.5	52.9	0.0	
	Direct Uses-Total Process		1.9	15.8	0.1	6.2	22.7	Х	
	Process Heating		26.5	15.8	0.0	7.2	26.2	Х	
	Process Cooling and Refrigeration		1.3	X	X	0.3	0.0	X	
	Machine Drive		2.0	X	0.1	8.2	25.0	Х	
	Electro-Chemical Processes		1.2						
	Other Process Use		1.5	X	0.0	5.0	0.0	Х	
	Direct Uses-Total Nonprocess		4.3	48.4	5.7	17.2	9.4	Х	
	Facility HVAC (g)		4.9	48.4	53.7	20.0	22.8	Х	
	Facility Lighting		4.4						
	Other Facility Support		5.0	X	0.0	12.6	30.6	Х	
	Onsite Transportation		15.9		2.5	2.6	5.9		
	Conventional Electricity Generation			Х	0.1	0.0	0.0	Х	
	Other Nonprocess Use		27.4	Х	0.2	53.7	0.0	X	
	End Use Not Reported	3.7	53.0	X	X	83.9	0.0	X	3.2
311221	Wet Corn Milling								
	TOTAL FUEL CONSUMPTION	0.0	0.0	X	0.0	0.0	0.0	0.0	0.0
	Indirect Uses-Boiler Fuel		0.0	X	X	0.0	X	0.0	
	Conventional Boiler Use		0.0	X	X	0.0	X	0.0	
	CHP and/or Cogeneration Process		X	X	X	0.0	X	0.0	
	Direct Uses-Total Process		0.0	X	0.0	0.0	0.0	X	
	Process Heating		0.0	X	X	0.0	0.0	X	
	Process Cooling and Refrigeration		0.0	X	X	0.0	X	X	
	Machine Drive		0.0	X	0.0	X	0.0	X	
	Electro-Chemical Processes		0.0						
	Other Process Use		X	X	0.0	0.0	Х	X	

	Direct Uses-Total Nonprocess		0.0	X	0.0	0.0	0.0	Х	
	Facility HVAC (g)		0.0	Х	0.0	0.0	0.0	X	
	Facility Lighting		0.0						
	Other Facility Support		0.0	Х	0.0	0.0	0.0	Х	
	Onsite Transportation		0.0		0.0	0.0	0.0		
	Conventional Electricity Generation			Х	0.0	0.0	X	X	
	Other Nonprocess Use		X	Х	0.0	X	0.0	Х	
	End Use Not Reported	0.0	X	Х	Х	X	Х	X	0.0
31131	Sugar								
	TOTAL FUEL CONSUMPTION	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Indirect Uses-Boiler Fuel		0.0	0.0	0.0	0.0	X	0.0	
	Conventional Boiler Use		0.0	0.0	0.0	0.0	X	0.0	
	CHP and/or Cogeneration Process		X	0.0	0.0	0.0	X	0.0	
	Direct Uses-Total Process		0.0	X	0.0	0.0	0.0	0.0	
	Process Heating		0.0	X	X	0.0	X	0.0	
	Process Cooling and Refrigeration		0.0	X	X	0.0	X	X	
	Machine Drive		0.0	X	0.0	0.0	X	X	
	Electro-Chemical Processes		0.0						
	Other Process Use		0.0	X	0.0	0.0	0.0	X	
	Direct Uses-Total Nonprocess		0.0	X	0.0	0.0	0.0	0.0	
	Facility HVAC (g)		0.0	X	X	0.0	0.0	X	
	Facility Lighting		0.0						
	Other Facility Support		0.0	X	0.0	0.0	0.0	X	
	Onsite Transportation		0.0		0.0	0.0	0.0		
	Conventional Electricity Generation			X	0.0	X	X	0.0	
	Other Nonprocess Use		0.0	X	0.0	X	X	X	
	End Use Not Reported	0.0	X	X	X	X	X	X	0.0
2114	Further d Venetable Description and Consider Foods								
3114	Fruit and Vegetable Preserving and Specialty Foods								
	TOTAL FUEL CONSUMPTION	3.2	6.1	0.0	6.9	3.2	5.8	X	2.5
	Indirect Uses-Boiler Fuel		5.6	X	3.9	4.1	7.5	X	
	Conventional Boiler Use		5.6	X	Х	3.5	0.1	X	
	CHP and/or Cogeneration Process		X	X	3.9	5.7	13.5	X	
	Direct Uses-Total Process		7.1	0.0	15.8	6.3	22.4	X	
	Process Heating		13.9	0.0	60.4	6.8	30.9	X	
	Process Cooling and Refrigeration		10.0	X	12.1	7.5	19.2	Х	
	Machine Drive		6.3	X	18.1	4.3	15.2	X	
	Electro-Chemical Processes		14.2						
	Other Process Use		3.4	X	74.6	0.0	70.7	Х	
	Direct Uses-Total Nonprocess		4.6	0.0	8.1	4.1	8.6	X	
	Facility HVAC (g)		5.1	0.0	64.0	5.2	11.1	X	

	Facility Lighting		6.6						
	Other Facility Support		3.4	X	0.0	5.4	17.0	X	
	Onsite Transportation		6.2		3.1	55.2	9.6		
	Conventional Electricity Generation			X	64.2	3.9	41.6	Х	
	Other Nonprocess Use		18.5	X	41.1	0.8	0.0	X	
	End Use Not Reported	7.3	35.5	X	X	17.7	64.3	X	2.5
3115	Dairy Products								
	TOTAL FUEL CONSUMPTION	2.2	3.3	28.5	32.4	2.3	12.9	X	19.9
	Indirect Uses-Boiler Fuel		4.7	67.2	0.4	2.6	22.5	X	
	Conventional Boiler Use		4.7	67.2	0.1	4.9	5.1	X	
	CHP and/or Cogeneration Process		X	X	1.2	3.2	53.5	X	
	Direct Uses-Total Process		3.8	0.0	41.1	4.2	6.1	Х	
	Process Heating		40.5	Х	82.9	4.0	7.2	Х	
	Process Cooling and Refrigeration		3.1	0.0	34.7	6.9	11.4	Х	
	Machine Drive		2.5	0.0	74.4	19.1	0.0	Х	
	Electro-Chemical Processes		32.6						
	Other Process Use		7.0	X	5.1	27.4	Х	Х	
	Direct Uses-Total Nonprocess		3.7	0.0	42.1	4.9	16.3	Х	
	Facility HVAC (g)		3.7	0.0	54.4	5.0	20.6	Х	
	Facility Lighting		6.7						
	Other Facility Support		3.7	X	2.8	8.3	68.9	Х	
	Onsite Transportation		4.7		27.4	22.3	17.7		
	Conventional Electricity Generation			X	20.7	75.7	Х	Х	
	Other Nonprocess Use		12.9	Х	63.6	0.9	0.3	Х	
	End Use Not Reported	14.8	24.4	X	X	24.3	64.6	X	19.9
3116	Animal Slaughtering and Processing								
	TOTAL FUEL CONSUMPTION	14.8	31.0	0.0	13.8	6.2	22.0	X	32.9
	Indirect Uses-Boiler Fuel		6.5	0.0	12.8	9.6	28.8	X	
	Conventional Boiler Use		6.5	0.0	16.9	16.9	36.5	X	
	CHP and/or Cogeneration Process		X	X	19.5	11.2	39.1	X	
	Direct Uses-Total Process		22.7	X	50.3	4.8	30.4	X	
	Process Heating		9.0	X	97.1	5.0	36.1	X	
	Process Cooling and Refrigeration		21.1	X	0.4	6.8	96.4	X	
	Machine Drive		27.2	X	37.1	6.9	34.8	X	
	Electro-Chemical Processes		26.7						
	Other Process Use		11.9	X	62.3	19.4	71.0	X	
	Direct Uses-Total Nonprocess		52.6	X	7.0	2.9	39.8	X	
	Facility HVAC (g)		55.6	X	6.7	4.6	50.4	X	
	Facility Lighting		58.0						
	Other Facility Support		4.9	X	39.4	3.0	43.2	X	

	Onsite Transportation		6.8		6.8	26.1	7.3		
	Conventional Electricity Generation			X	58.5	42.1	96.4	X	
	Other Nonprocess Use		14.7	X	15.7	0.0	0.0	X	
	End Use Not Reported	29.7	30.8	X	X	16.3	50.0	X	32.9
312	BEVERAGE AND TOBACCO PRODUCTS								
	TOTAL FUEL CONSUMPTION	12.0	15.5	0.0	29.3	8.5	11.3	0.0	84.3
	Indirect Uses-Boiler Fuel		13.0	0.0	0.1	11.6	20.5	0.0	
	Conventional Boiler Use		13.0	0.0	0.0	22.7	27.4	0.0	
	CHP and/or Cogeneration Process		X	0.0	0.1	3.8	29.6	0.0	-
	Direct Uses-Total Process		17.6	X	3.9	5.7	32.5	0.0	-
	Process Heating		13.3	X	0.6	6.3	50.4	0.0	
	Process Cooling and Refrigeration		12.4	X	8.6	24.4	78.9	X	
	Machine Drive		21.9	X	30.6	8.0	22.6	X	
	Electro-Chemical Processes		12.6						
	Other Process Use		6.9	X	0.1	20.4	27.7	X	
	Direct Uses-Total Nonprocess		10.9	0.0	37.9	9.9	10.5	0.0	-
	Facility HVAC (g)		14.7	X	71.2	10.7	18.9	0.0	-
	Facility Lighting		11.1						-
	Other Facility Support		7.9	X	X	18.0	24.9	X	
	Onsite Transportation		8.2		15.0	6.2	10.2		
	Conventional Electricity Generation			X	96.6	19.2	77.0	X	
	Other Nonprocess Use		26.2	0.0	82.9	18.0	92.2	X	
	End Use Not Reported	81.5	22.7	X	X	65.7	47.4	X	84.3
3121	Beverages								
J121	Developes								
	TOTAL FUEL CONSUMPTION	12.8	16.3	0.0	31.3	9.2	12.9	0.0	84.3
	Indirect Uses-Boiler Fuel		13.5	0.0	0.1	12.9	27.8	0.0	
	Conventional Boiler Use		13.5	X	0.0	25.7	68.3	0.0	
	CHP and/or Cogeneration Process		X	0.0	0.1	4.1	29.8	0.0	
	Direct Uses-Total Process		18.3	X	3.9	5.9	38.8	0.0	
	Process Heating		13.5	X	0.6	6.5	62.1	0.0	
	Process Cooling and Refrigeration		12.5	X	8.6	24.4	78.9	X	
	Machine Drive		23.2	X	30.6	9.7	30.0	X	
	Electro-Chemical Processes		12.7						
	Other Process Use		7.0	X	0.1	20.6	27.7	X	
	Direct Uses-Total Nonprocess		12.1	0.0	38.5	10.5	11.0	0.0	
	Facility HVAC (g)		16.6	X	71.6	11.1	19.8	0.0	
	Facility Lighting		12.2						
	Other Facility Support		8.9	Х	Х	18.6	25.2	X	
	Onsite Transportation		8.4		15.2	13.6	10.7		
	Conventional Electricity Generation			X	96.6	19.2	77.0	X	

	Other Nonprocess Use		26.7	0.0	86.3	23.9	92.4	x	
	End Use Not Reported	81.5	22.8	Х	X	65.7	47.4	X	84.3
3122	Tobacco								
	TOTAL FUEL CONSUMPTION	0.0	0.0	0.0	0.0	0.0	0.0	X	0.0
	Indirect Uses-Boiler Fuel	0.0	0.0	0.0	0.0	0.0	0.0	x	
	Conventional Boiler Use		0.0	0.0	0.0	0.0	0.0	X	
	CHP and/or Cogeneration Process		X	X	0.0	0.0	0.0	X	
	Direct Uses-Total Process		0.0	X	0.0	0.0	0.0	X	
	Process Heating		0.0	X	X	0.0	0.0	X	
	Process Cooling and Refrigeration		0.0	X	X	X	X	X	
	Machine Drive		0.0	X	0.0	0.0	0.0	X	
	Electro-Chemical Processes		0.0						
	Other Process Use		0.0	X	X	0.0	Х	X	
	Direct Uses-Total Nonprocess		0.0	X	0.0	0.0	0.0	X	
	Facility HVAC (g)		0.0	X	0.0	0.0	0.0	X	
	Facility Lighting		0.0						
	Other Facility Support		0.0	X	X	0.0	0.0	X	
	Onsite Transportation		0.0		0.0	0.0	0.0		
	Conventional Electricity Generation			X	0.0	X	X	X	
	Other Nonprocess Use		0.0	Х	0.0	0.0	0.0	X	
	End Use Not Reported	0.0	0.0	X	X	X	X	X	0.0
313	TEXTILE MILLS								
	TOTAL FUEL CONSUMPTION	6.4	6.1	78.4	21.0	12.7	25.7	16.2	3.9
	Indirect Uses-Boiler Fuel		35.2	78.4	54.0	19.1	46.5	16.2	
	Conventional Boiler Use		35.2	82.3	43.5	29.1	1.9	45.3	
	CHP and/or Cogeneration Process		Х	88.0	63.3	22.5	76.0	0.0	
	Direct Uses-Total Process		6.3	Х	13.9	12.6	7.1	Х	
	Process Heating		12.1	Х	0.0	13.3	4.7	Х	
	Process Cooling and Refrigeration		17.6	X	Х	80.3	X	Х	
	Machine Drive		7.5	X	79.1	31.1	59.8	Х	
	Electro-Chemical Processes		52.5						
	Other Process Use		40.1	X	Х	51.7	36.9	X	
	Direct Uses-Total Nonprocess		8.4	X	13.1	12.8	16.5	X	
	Facility HVAC (g)		9.8	X	83.3	14.9	38.0	X	
	Facility Lighting		9.8						
	Other Facility Support		9.7	X	0.0	23.6	83.5	X	
	Onsite Transportation		14.6		72.2	42.1	13.1		
	Conventional Electricity Generation			X	X	68.1	X	X	
	Other Nonprocess Use		23.5	X	0.4	X	81.2	X	
	End Use Not Reported	13.3	73.1	X	X	X	68.9	X	3.9

314	TEXTILE PRODUCT MILLS								
	TOTAL FUEL CONSUMPTION	9.7	7.9	x	28.1	13.5	29.1	0.0	76.5
	Indirect Uses-Boiler Fuel		15.7	X	33.6	18.2	0.0	X	
	Conventional Boiler Use		15.7	X	33.8	20.1	0.0	X	
	CHP and/or Cogeneration Process		X	X	0.0	6.2	Х	Х	
	Direct Uses-Total Process		8.5	Х	2.0	16.8	58.4	0.0	
	Process Heating		23.5	X	0.0	15.0	44.6	0.0	
	Process Cooling and Refrigeration		18.9	X	Х	X	Х	Х	
	Machine Drive		8.5	X	Х	54.2	99.4	Х	
	Electro-Chemical Processes		99.4						
	Other Process Use		91.3	X	39.7	X	Х	Х	
	Direct Uses-Total Nonprocess		13.2	X	53.2	32.2	34.9	Х	
	Facility HVAC (g)		14.7	Х	89.5	29.2	53.7	Х	
	Facility Lighting		15.9						
	Other Facility Support		13.8	Х	46.2	88.3	Х	Х	
	Onsite Transportation		28.4		48.7	X	39.0		
	Conventional Electricity Generation			X	Х	X	Х	Х	
	Other Nonprocess Use		76.1	X	Х	X	Х	Х	
	End Use Not Reported	83.1	82.0	X	X	86.6	88.6	X	76.5
315	APPAREL								
	TOTAL FUEL CONSUMPTION	10.1	11.3	X	51.8	14.3	42.3	99.4	98.2
	Indirect Uses-Boiler Fuel		30.4	Х	Х	19.2	47.9	Х	
	Conventional Boiler Use		30.4	Х	Х	32.3	98.2	Х	
	CHP and/or Cogeneration Process		Х	Х	Х	24.3	48.1	Х	
	Direct Uses-Total Process		16.0	X	51.8	18.1	98.2	X	
	Process Heating		29.7	X	X	18.7	98.2	Х	
	Process Cooling and Refrigeration		19.7	X	X	77.7	X	Х	
	Machine Drive		19.0	X	X	62.6	X	X	
	Electro-Chemical Processes		15.2						
	Other Process Use		72.1	X	51.8	X	X	Х	
	Direct Uses-Total Nonprocess		12.3	X	X	32.8	67.0	99.4	
	Facility HVAC (g)		12.6	X	X	34.3	66.8	99.4	
	Facility Lighting		15.9						
	Other Facility Support		20.3	X	X	56.9	X	X	
	Onsite Transportation		26.3		X	X	75.3		
	Conventional Electricity Generation			X	X	X	X	X	
	Other Nonprocess Use		18.2	X	X	99.4	75.1	X	
	End Use Not Reported	52.5	52.0	X	Х	72.9	0.0	Х	98.2
316	LEATHER AND ALLIED PRODUCTS								

	TOTAL FUEL CONSUMPTION	7.7	5.1	Χ	4.0	11.6	31.1	X	21.5
	Indirect Uses-Boiler Fuel		21.2	Х	2.5	12.8	55.8	Х	
	Conventional Boiler Use		21.2	Х	0.1	7.0	Х	Х	-
	CHP and/or Cogeneration Process		X	X	19.0	22.7	55.8	Х	-
	Direct Uses-Total Process		4.6	X	X	17.4	52.2	Х	-
	Process Heating		11.2	Х	X	16.2	55.1	Х	
	Process Cooling and Refrigeration		33.9	Х	X	52.4	Х	Х	
	Machine Drive		5.0	Х	X	28.6	67.1	Х	
	Electro-Chemical Processes		0.0						
	Other Process Use		12.2	Х	X	45.5	Х	Х	
	Direct Uses-Total Nonprocess		11.3	X	22.5	20.7	27.6	Х	
	Facility HVAC (g)		17.5	Х	45.5	22.0	42.0	Х	-
	Facility Lighting		8.0						
	Other Facility Support		10.3	Х	X	13.3	62.0	Х	
	Onsite Transportation		20.1		0.3	Х	5.5		
	Conventional Electricity Generation			Х	38.1	Х	Х	Х	-
	Other Nonprocess Use		94.5	Х	0.0	82.8	Х	Х	
	End Use Not Reported	34.5	37.6	Х	X	33.4	0.0	Х	21.
	WOOD PRODUCTS								
	TOTAL FUEL CONSUMPTION	4.0	3.0	3.5	31.5	10.2	5.6	63.3	5.
	Indirect Uses-Boiler Fuel		15.4	86.3	14.2	2.8	3.8	80.4	
	Conventional Boiler Use		15.4	X	4.5	3.4	5.0	X	·
	CHP and/or Cogeneration Process		X	86.3	24.6	3.5	3.5	80.4	
	Direct Uses-Total Process		3.1	0.0	71.3	16.8	12.9	97.1	
	Process Heating		12.3	0.0	28.3	19.9	14.4	97.1	
	Process Cooling and Refrigeration		5.8	X	93.2	64.3	97.1	X	
	Machine Drive		3.3	0.0	19.7	15.5	23.6	X	
	Electro-Chemical Processes		7.6						
	Other Process Use		23.6	X	94.3	0.9	38.0	X	
	Direct Uses-Total Nonprocess		5.6	1.3	4.8	8.8	4.7	95.1	
	Facility HVAC (g)		10.1	1.3	26.2	10.2	24.2	95.1	
	Facility Lighting		3.9						
	Other Facility Support		5.5	X	9.8	14.3	55.8	X	
	Onsite Transportation		10.3		4.0	82.1	4.8		
	Conventional Electricity Generation			X	44.5	50.8	37.5	X	
	Other Nonprocess Use		27.0	X	50.2	6.1	3.8	X	
	End Use Not Reported	5.0	10.5	X	X	42.8	53.5	X	5.
.3	Sawmills								

	TOTAL FUEL CONSUMPTION	5.2	7.0	3.6	3.6	36.2	8.6	Х	1.3
	Indirect Uses-Boiler Fuel		25.0	86.3	7.0	3.1	2.0	Х	
	Conventional Boiler Use		25.0	X	0.8	4.5	0.0	Х	
	CHP and/or Cogeneration Process		X	86.3	13.7	3.5	2.0	Х	
	Direct Uses-Total Process		7.3	Х	12.5	55.3	14.6	Х	
	Process Heating		3.8	X	20.9	56.9	14.8	Х	
	Process Cooling and Refrigeration		36.4	X	55.9	43.8	X	Х	
	Machine Drive		7.7	X	15.8	2.1	34.5	X	
	Electro-Chemical Processes		6.4						
	Other Process Use		15.3	X	16.7	X	43.3	X	
	Direct Uses-Total Nonprocess		7.1	0.6	3.6	5.2	8.1	X	
	Facility HVAC (g)		11.7	0.6	7.4	5.0	6.4	X	
	Facility Lighting		6.5						
	Other Facility Support		6.9	X	17.5	23.9	7.8	X	
	Onsite Transportation		9.2		3.6	31.5	11.1		
	Conventional Electricity Generation			X	12.2	0.0	0.0	X	
	Other Nonprocess Use		23.8	X	22.2	X	45.3	X	
	End Use Not Reported	1.3	3.9	X	X	0.0	7.2	X	1.3
3212	Veneer, Plywood, and Engineered Woods								
J212	veneer, riywood, and Engineered woods								
	TOTAL FUEL CONSUMPTION	1.0	1.2	0.0	3.2	1.2	3.1	80.4	1.5
	Indirect Uses-Boiler Fuel	1.0	1.3	X	29.6	2.7	0.1	80.4	1.5
	Conventional Boiler Use		1.3	X	0.0	0.1	0.0	80.4 X	
	CHP and/or Cogeneration Process		X X	X	66.4	3.6	2.4	80.4	
	Direct Uses-Total Process		1.3	0.0	7.8	1.0	4.9	Х	
	Process Heating		1.2	0	0	1.4	0	X	
	Process Cooling and Refrigeration		2.5	X	X	0	X	X	
	Machine Drive		1.4	0	24.8	1.8	14	X	
	Electro-Chemical Processes		0						
	Other Process Use		2.6	X	0	0.9	1.6	X	
	Direct Uses-Total Nonprocess		1.8	X	3.3	4	3.5	X	
	Facility HVAC (g)		3.2	X	36.5	6.4	28.7	Х	
	Facility Lighting		1.7						
	Other Facility Support		2.3	X	4.1	8	47.9	X	
	Onsite Transportation		10		3.1	80.4	3.1		
	Conventional Electricity Generation			Х	40	0	43.2	Х	
	Other Nonprocess Use		4.5	Х	32.4	0	0	Х	
	End Use Not Reported	1.5	4.7	X	X	60.6	63.6	X	1.5
321219	Reconstituted Wood Products								
	TOTAL FUEL CONSUMPTION	0.5	1.5	0	2.7	0.9	5.9	X	0.1
	Indirect Uses-Boiler Fuel		0.1	X	0	0.1	0	X	
1									

	Conventional Boiler Use		0.1	Х	0	0	0	Х	
	CHP and/or Cogeneration Process		X	X	X	0.1	0	X	
	Direct Uses-Total Process		1.6	0	0	1.3	15.6	X	
	Process Heating		0.8	0	0	2	0	X	
	Process Cooling and Refrigeration		0.3	X	X	X	X	X	
	Machine Drive		1.6	0	0	0	23.4	Х	
	Electro-Chemical Processes		0						
	Other Process Use		5.1	Х	X	0.2	Х	Х	
	Direct Uses-Total Nonprocess		1.5	Х	2.7	1.2	7.4	Х	
	Facility HVAC (g)		2.6	Х	0	3	53.2	Х	
	Facility Lighting		1.3						
	Other Facility Support		0.8	X	5.8	31.4	56.9	Х	
	Onsite Transportation		14.4		2.8	X	5.9		
	Conventional Electricity Generation			Х	0	0	Х	Х	
	Other Nonprocess Use		0	Х	Х	0	0	Х	
	End Use Not Reported	0.1	Х	Х	X	Х	X	Х	0.1
3219	Other Wood Products								
	TOTAL FUEL CONSUMPTION	16.3	5.7	85.9	65.7	14.9	14.7	75.3	33.2
	Indirect Uses-Boiler Fuel		33.5	X	66.9	16.5	67.3	X	
	Conventional Boiler Use		33.5	X	54.5	12.4	88.5	X	
	CHP and/or Cogeneration Process		Х	X	80.7	23.4	63.1	X	
	Direct Uses-Total Process		5.4	X	86.8	26.1	24.5	97.1	
	Process Heating		27.4	X	61.0	27.7	27.5	97.1	
	Process Cooling and Refrigeration		10.6	X	97.1	82.7	97.1	X	
	Machine Drive		5.5	X	54.5	59.7	45.4	X	
	Electro-Chemical Processes		73.7						
	Other Process Use		44.2	X	96.3	14.3	65.7	X	
	Direct Uses-Total Nonprocess		11.8	85.9	20.2	13.8	14.5	95.1	
	Facility HVAC (g)		17.7	85.9	52.3	14.5	36.4	95.1	
	Facility Lighting		9.0						
	Other Facility Support		12.9	X	X	22.0	95.4	X	
	Onsite Transportation		16.4		18.0	83.5	16.1		
	Conventional Electricity Generation			X	83.5	69.6	X	X	
	Other Nonprocess Use		56.7	X	73.1	75.0	0.0	X	
	End Use Not Reported	32.8	77.4	X	X	81.0	59.2	X	33.2
322	PAPER								
	TOTAL FUEL CONSUMPTION	0.4	1.4	0.0	0.7	1.0	11.1	0.0	0.1
	Indirect Uses-Boiler Fuel		2.6	0.0	1.3	1.2	27.4	0.0	
	Conventional Boiler Use		2.6	0.0	25.4	4.9	0.0	0.0	
	CHP and/or Cogeneration Process		X	0.0	0.1	1.1	45.7	0.0	

Direct Uses-Total Process 1.3 0.0 0.0 2.2 24.2 0.0 Process leating 6.2 0.0 0.0 2.3 19.7 X x Process Cooling and Refrigeration 14.2 X X 11.8 95.9 X Electro-Chemical Processes 1.3 X 0.0 16.9 85.2 0.0 Other Process Use 1.9 X 0.0 1.5 0.0 0.0 0.0 Other Process Use 9.9 X 0.0 1.5 0.0 0.0 0.0 2.7 Direct Uses-Total Nonprocess 3.8 0.0 0.6 6.4 14.3 X Facility HVAC (g) 3.6
Machine Drive
Machine Drive 1.3 X 0.0 16.9 85.2 0.0 Electro-Chemical Processes 13.0
Electro-Chemical Processes
Direct Uses-Total Nonprocess
Direct Uses-Total Nonprocess
Facility HVAC (g)
Facility Lighting
Other Facility Support 8.5 X 71.8 8.8 22.4 X Onsite Transportation 14.6 0.6 0.1 10.3 Conventional Electricity Generation 0.0 0.0 0.2 98.3 X Other Nonprocess Use 173.3 X 0.1 85.0 20.9 X End Use Not Reported 0.1 68.4 0.0 0.0 98.9 32.0 X 0.1 TOTAL FUEL CONSUMPTION 0.0 <td< th=""></td<>
Onsite Transportation 14.6 0.6 0.1 10.3 Conventional Electricity Generation 0.0 0.0 0.2 98.3 X Other Nonprocess Use 173.3 X 0.1 85.0 20.9 X End Use Not Reported 0.1 68.4 0.0 0.0 98.9 32.0 X 0.1 TOTAL FUEL CONSUMPTION 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 Indirect Uses-Boiler Fuel 0.0
Conventional Electricity Generation
Other Nonprocess Use
End Use Not Reported 0.1 68.4 0.0 0.0 98.9 32.0 X 0.1
TOTAL FUEL CONSUMPTION 0.0
TOTAL FUEL CONSUMPTION 0.0
Indirect Uses-Boiler Fuel 0.0 0.0 0.0 0.0 0.0 0.0 0.0 Conventional Boiler Use 0.0 X 0.0 0.0 X X X X 0.0 0.0 0.0 0.0 0.0 0.0 0.0 Direct Uses-Total Process 0.0 0.0 0.0 0.0 X X X X Process Heating 0.0 0.0 0.0 0.0 X X X X X Process Cooling and Refrigeration 0.0 X X X X X X Machine Drive 0.0 X 0.0 0.0 0.0 X X X X
Indirect Uses-Boiler Fuel 0.0 0.0 0.0 0.0 0.0 0.0 0.0 Conventional Boiler Use 0.0 X 0.0 0.0 X X X X 0.0 0.0 0.0 0.0 0.0 0.0 0.0 Direct Uses-Total Process 0.0 0.0 0.0 0.0 X X X X Process Heating 0.0 0.0 0.0 0.0 X X X X X Process Cooling and Refrigeration 0.0 X X X X X X Machine Drive 0.0 X 0.0 0.0 0.0 X X X X
Conventional Boiler Use 0.0 X 0.0 0.0 X X X CHP and/or Cogeneration Process X 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 X X X X 0.0 0.0 0.0 0.0 X X X X 0.0 0.0 0.0 0.0 X X X X 0.0 X X X X X 0.0 X X X X X 0.0 X X X
CHP and/or Cogeneration Process X 0.0 0.0 0.0 0.0 0.0 0.0 Direct Uses-Total Process 0.0 0.0 0.0 0.0 X X X Process Heating 0.0 0.0 0.0 0.0 X X X X X Process Cooling and Refrigeration 0.0 X X X X X Machine Drive 0.0 X 0.0 0.0 0.0 X X X
Direct Uses-Total Process 0.0 0.0 0.0 0.0 X X X Process Heating 0.0 0.0 0.0 0.0 X X X X Process Cooling and Refrigeration 0.0 X X X X X X X Machine Drive 0.0 X 0.0 0.0 X X X
Process Heating 0.0 0.0 0.0 0.0 X X X Process Cooling and Refrigeration 0.0 X X X X X X X Machine Drive 0.0 X 0.0 0.0 X X X
Process Cooling and Refrigeration 0.0 X X X X X X X Machine Drive 0.0 X 0.0 0.0 X X X
Machine Drive 0.0 X 0.0 0.0 X X
Flectro-Chemical Processes
Licetty Gittimus 1 1000000
Other Process Use 0.0 X X X X
Direct Uses-Total Nonprocess 0.0 0.0 0.0 0.0 X
Facility HVAC (g) 0.0 X X 0.0 0.0 X
Facility Lighting 0.0
Other Facility Support 0.0 X X 0.0 X X
Onsite Transportation 0.0 0.0 X 0.0
Conventional Electricity Generation 0.0 0.0 0.0 X X
Other Nonprocess Use X X X X X X
End Use Not Reported 0.0 X X 0.0 X X X 0.0
322121 Paper Mills, except Newsprint
TOTAL FUEL CONSUMPTION 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
Indirect Uses-Boiler Fuel 0.0 0.0 0.0 0.0 0.0 0.0
Conventional Boiler Use 0.0 0.0 0.0 0.0 0.0 0.0
CHP and/or Cogeneration Process X 0.0 0.0 0.0 0.0 0.0
Direct Uses-Total Process 0.0 0.0 0.0 0.0 0.0 0.0
Process Heating 0.0 0.0 0.0 0.0 0.0 X

	Process Cooling and Refrigeration		0.0	X	X	X	X	Х	
	Machine Drive		0.0	Х	0.0	0.0	0.0	0.0	
	Electro-Chemical Processes		0.0						
	Other Process Use		0.0	X	0.0	0.0	Χ	0.0	
	Direct Uses-Total Nonprocess		0.0	0.0	0.0	0.0	0.0	Х	
	Facility HVAC (g)		0.0	0.0	0.0	0.0	0.0	Х	
	Facility Lighting		0.0						
	Other Facility Support		0.0	Х	0.0	0.0	0.0	Х	
	Onsite Transportation		0.0		0.0	0.0	0.0		
	Conventional Electricity Generation			Х	0.0	0.0	X	X	
	Other Nonprocess Use		Х	Х	0.0	X	0.0	Х	
	End Use Not Reported	0.0	X	X	0.0	X	0.0	X	0.0
322122	Newsprint Mills								
	TOTAL FUEL CONSUMPTION	0.0	0.0	X	0.0	0.0	0.0	X	0.0
	Indirect Uses-Boiler Fuel	0.0	0.0	X	0.0	0.0	0.0	X	0.0
	Conventional Boiler Use		0.0	x	X	0.0	0.0	X	
	CHP and/or Cogeneration Process		X	X	0.0	0.0	X X	X	
	Direct Uses-Total Process		0.0	X	X	0.0	X	X	
	Process Heating		0.0	X	X	0.0	X	X	
	Process Cooling and Refrigeration		0.0	X	X	X	X	X	
	Machine Drive		0.0	X	X	X	X	X	
	Electro-Chemical Processes		X						
	Other Process Use		X	X	X	X	X	X	
	Direct Uses-Total Nonprocess		0.0	X	0.0	0.0	0.0	X	
	Facility HVAC (g)		0.0	X	X	0.0	X	X	
	Facility Lighting		0.0						
	Other Facility Support		X	X	X	0.0	X	X	
	Onsite Transportation		X		0.0	X	0.0		
	Conventional Electricity Generation			X	X	X	X	X	
	Other Nonprocess Use		X	Х	X	X	X	X	
	End Use Not Reported	0.0	X	X	X	X	X	X	0.0
322130	Paperboard Mills								
	TOTAL FUEL CONSUMPTION	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Indirect Uses-Boiler Fuel		0.0	0.0	0.0	0.0	0.0	0.0	
	Conventional Boiler Use		0.0	0.0	0.0	0.0	X	0.0	
	CHP and/or Cogeneration Process		X	0.0	0.0	0.0	0.0	0.0	
	Direct Uses-Total Process		0.0	0.0	0.0	0.0	0.0	X	
	Process Heating		0.0	0.0	0.0	0.0	0.0	X	
	Process Cooling and Refrigeration		0.0	X	X	0.0	X	X	
	Machine Drive		0.0	X	0.0	0.0	0.0	X	

	Electro-Chemical Processes		0.0						
	Other Process Use		0.0	X	0.0	0.0	0.0	X	
	Direct Uses-Total Nonprocess		0.0	X	0.0	0.0	0.0	X	
	Facility HVAC (g)		0.0	X	0.0	0.0	0.0	X	
	Facility Lighting		0.0						
	Other Facility Support		0.0	X	X	0.0	0.0	X	
	Onsite Transportation		0.0		0.0	0.0	0.0		
	Conventional Electricity Generation			X	X	0.0	X	X	
	Other Nonprocess Use		0.0	X	0.0	X	0.0	X	
	End Use Not Reported	0.0	X	0.0	0.0	X	0.0	X	0.0
	Lind Odd Hot Reported								
323	PRINTING AND RELATED SUPPORT								
	TOTAL FUEL CONSUMPTION	7.7	7.8	50.9	43.0	10.0	21.4	X	59.2
	Indirect Uses-Boiler Fuel		31.0	X	57.8	18.8	0.0	X	
	Conventional Boiler Use		31.0	X	57.8	16.7	0.0	X	
	CHP and/or Cogeneration Process		X	X	X	60.9	X	X	
	Direct Uses-Total Process		8.5	50.9	61.6	14.8	50.1	X	
	Process Heating		17.7	X	99.0	14.5	67.0	X	
	Process Cooling and Refrigeration		15.0	X	X	70.5	X	X	
	Machine Drive		8.6	X	76.5	41.4	70.0	X	
	Electro-Chemical Processes		86.8						
	Other Process Use		34.9	50.9	X	82.9	X	X	
	Direct Uses-Total Nonprocess		9.3	50.9	52.7	11.7	17.4	X	
	Facility HVAC (g)		10.3	50.9	66.1	12.2	59.8	X	
	Facility Lighting		10.8						
	Other Facility Support		14.6	X	99.0	26.0	96.0	X	
	Onsite Transportation		20.2		18.6	52.8	16.5		
	Conventional Electricity Generation			X	38.7	99.0	X	X	
	Other Nonprocess Use		51.1	X	55.9	57.8	99.0	X	
	End Use Not Reported	34.6	43.5	X	94.9	41.3	98.2	X	59.2
324	PETROLEUM AND COAL PRODUCTS								
	TOTAL FUEL CONSUMPTION	0.2	0.5	9.1	8.9	0.3	5.6	19.9	0.1
	Indirect Uses-Boiler Fuel		1.3	0.0	7.3	0.3	2.6	19.9 X	
	Conventional Boiler Use		1.3	0.0	0.8	0.1	1.2	X	-
			X X	X	9.9	0.5	6.3	X	
	CHP and/or Cogeneration Process Direct Uses-Total Process		0.6	9.7	6.8	0.5	6.6	19.9	
	Process Heating		1.3	9.7	10.5	0.4	2.8	19.9	
	Process Cooling and Refrigeration		0.8	9.7 X	10.5	11.6	2.8 0	X	
	Machine Drive Electro-Chemical Processes	-	0.6	X	8.9	2.6	85.8	X	
	Other Process Use		0.8		23.8	0.3		X	
	Other Process Use		0.4	X	23.8	U.3	5	X	-

	Direct Uses-Total Nonprocess		0.3	Х	23.2	0.4	6.4	Х	
	Facility HVAC (g)		0.4	X	23.2	0.7	17.8	X	
	Facility Lighting		0.4						
	Other Facility Support		0.2	X	6.4	1	0	X	
	Onsite Transportation		1.9		17.6	6.3	7.7		
	Conventional Electricity Generation			X	0	0.1	0	X	
	Other Nonprocess Use		2.4	X	50	9.5	21.1	Х	
	End Use Not Reported	0.1	17	X	24	0	13.7	X	0.1
324110	Petroleum Refineries								
	TOTAL FUEL CONSUMPTION	0	0	0	0	0	0	X	0
	Indirect Uses-Boiler Fuel		0	0	0	0	0	Х	
	Conventional Boiler Use		0	0	0	0	0	X	
	CHP and/or Cogeneration Process		X	X	0	0	0	Х	
	Direct Uses-Total Process		0	0	0	0	0	X	
	Process Heating		0	0	0	0	0	X	
	Process Cooling and Refrigeration		0	X	X	0	0	Х	
	Machine Drive		0	X	0	0	0	X	
	Electro-Chemical Processes		0						
	Other Process Use		0	X	0	0	0	X	
	Direct Uses-Total Nonprocess		0	X	0	0	0	X	
	Facility HVAC (g)		0	X	0	0	0	X	
	Facility Lighting		0						
	Other Facility Support		0	X	X	0	0	X	
	Onsite Transportation		0		0	X	0		
	Conventional Electricity Generation			X	0	0	0	X	
	Other Nonprocess Use		0	X	0	0	0	X	
	End Use Not Reported	0	0	X	0	0	0	X	0
324121	Asphalt Paving Mixture and Block								
	TOTAL FUEL CONSUMPTION	5.4	8.7	30.1	15.2	3.9	36.8	19.9	17.6
	Indirect Uses-Boiler Fuel		2.5	X	48.8	5.2	73.8	Х	
	Conventional Boiler Use		2.5	X	9.1	10.3	88.6	X	
	CHP and/or Cogeneration Process		X	X	57.4	6.1	93.6	X	
	Direct Uses-Total Process		10.8	30.1	10.1	4.5	38.7	19.9	
	Process Heating		8.8	30.1	17.8	5.1	26.2	19.9	
	Process Cooling and Refrigeration		30	X	0	49.6	X	X	
	Machine Drive		12.5	X	11.9	9	87.5	X	
	Electro-Chemical Processes		55.4						
	Other Process Use		3.6	X	3.3	3.1	0	X	
	Direct Uses-Total Nonprocess		3.6	X	45.4	6.8	20.8	X	
	Facility HVAC (g)		3.4	X	65.9	4.6	54.2	X	

	Facility Lighting		6.5						
	Other Facility Support		4.1	X	52.7	2.7	0	Х	
	Onsite Transportation		12.9		37.5	69.2	19.1		
	Conventional Electricity Generation			Х	0	Х	Χ	X	
	Other Nonprocess Use		6.8	Х	66.5	26.9	0	X	
	End Use Not Reported	17.1	37.6	Х	Х	0	55.4	Х	17.6
324122	Asphalt Shingle and Coating Materials								
	TOTAL FUEL CONSUMPTION	1.1	1.7	X	0.9	1.1	2.6	X	0.1
	Indirect Uses-Boiler Fuel		8.6	X	0	0.7	1.1	X	
	Conventional Boiler Use		8.6	X	0	0.2	0	X	
	CHP and/or Cogeneration Process		X	X	0	0.9	1.3	X	
	Direct Uses-Total Process		1.9	X	0	1.5	0.3	X	
	Process Heating		2.4	X	0	1.7	1.4	X	
	Process Cooling and Refrigeration		7.6	X	X	0.3	0	X	
	Machine Drive		1.9	X	0	0.5	0	X	
	Electro-Chemical Processes		0						
	Other Process Use		0	X	0	0	0	X	
	Direct Uses-Total Nonprocess		1.5	X	1.2	5.4	2.7	X	
	Facility HVAC (g)		1.4	X	0	3.6	0.3	X	
	Facility Lighting		2						
	Other Facility Support		2.8	X	0	0.8	0	Х	
	Onsite Transportation		0		1.4	0	2.9		
	Conventional Electricity Generation			X	0	0	Χ	X	
	Other Nonprocess Use		24	X	0	22	0	X	
	End Use Not Reported	5.6	28.4	X	X	X	26.2	X	0.1
324191	Petroleum Lubricating Oil and Grease Products								
	TOTAL FUEL CONSUMPTION	17	19	X	51	17	20	X	0
	Indirect Uses-Boiler Fuel		6	X	36	10	1	X	
	Conventional Boiler Use		6	X	0	5	X	X	
	CHP and/or Cogeneration Process		X	X	71	12	1	X	
	Direct Uses-Total Process		23	X	84	28	25	X	
	Process Heating		5	X	0	30	46	X	
	Process Cooling and Refrigeration		11	X	X	57	0	X	
	Machine Drive		28	X	0	48	1	X	
	Electro-Chemical Processes		50						
	Other Process Use		0	X	87	18	57	X	
	Direct Uses-Total Nonprocess		3	X	8	4	31	X	
			-		22	_	0.4	V	
	Facility HVAC (g)		5	X	22	5	84	X	
	Facility HVAC (g) Facility Lighting Other Facility Support		2	X	 0	 4	 0	X X	

	Onsite Transportation		4		5	0	38		
	Conventional Electricity Generation			X	0	69	X	X	
	Other Nonprocess Use		20	X	1	0	57	X	
	End Use Not Reported	4	47	X	89	X	7	X	0
324199	Other Petroleum and Coal Products								
	TOTAL FUEL CONSUMPTION	0.0	0.0	X	0.0	0.0	0.0	X	0.0
	Indirect Uses-Boiler Fuel		0.0	X	0.0	0.0	X	X	
	Conventional Boiler Use		0.0	X	0.0	0.0	X	X	
	CHP and/or Cogeneration Process		X	X	X	0.0	X	X	
	Direct Uses-Total Process		0.0	X	0.0	0.0	0.0	X	
	Process Heating		0.0	X	0.0	0.0	0.0	X	
	Process Cooling and Refrigeration		0.0	X	X	X	X	X	
	Machine Drive		0.0	X	0.0	0.0	0.0	X	
	Electro-Chemical Processes		0.0						
	Other Process Use		0.0	X	0.0	0.0	X	X	
	Direct Uses-Total Nonprocess		0.0	X	0.0	0.0	0.0	X	
	Facility HVAC (g)		0.0	X	X	0.0	0.0	X	
	Facility Lighting		0.0						
	Other Facility Support		0.0	X	0.0	0.0	0.0	X	
	Onsite Transportation		0.0	 	0.0	0.0	0.0		
	Conventional Electricity Generation			X	0.0	X	0.0	X	
	Other Nonprocess Use		0.0	X	0.0	0.0	X	X	
	End Use Not Reported	0.0	0.0	X	X	X	0.0	X	0.0
325	CHEMICALS								
	TOTAL FUEL CONSUMPTION	1.6	1.5	8.3	2.2	1.7	13.9	0.4	4.3
	Indirect Uses-Boiler Fuel		4.9	3.3	5.2	1.3	26.6	0.3	
	Conventional Boiler Use		4.9	3.3	5.5	2.3	29.2	0	
	CHP and/or Cogeneration Process		X	0	7.9	1.8	34.7	0.3	
	Direct Uses-Total Process		1.5	38.3	4.3	2.9	D	1.6	
	Process Heating		6.9	38.3	13.9	3.6	34.1	3.6	
	Process Cooling and Refrigeration		2.8	X	2.3	6.6	20.9	X	
	Machine Drive		2	X	2.6	2.9	54.8	X	
	Electro-Chemical Processes		0.8						
	Other Process Use		4.2	X	2.5	4.4	D	0.0	
	Direct Uses-Total Nonprocess		3.4	X	2.2	6.1	D	0.0	
	Facility HVAC (g)		3.5	X	7.1	6.6	D	0.0	
	Facility Lighting		3.9						
	Other Facility Support		7.3	X	0.1	10.9	23.8	X	
	Onsite Transportation		12.7		2.5	8.6	20.9		
	Conventional Electricity Generation		-	X	2.0	23.2	0.0	X	

	Other Nonprocess Use		18.3	Х	9.0	21.5	42.9	Х	
	End Use Not Reported	4.2	10.4	0.0	0.0	0.9	44.0	X	4.3
325110	Petrochemicals								
	TOTAL FUEL CONSUMPTION	0	0.0	X	0.0	0.0	0.0	Х	
	Indirect Uses-Boiler Fuel		0.0	X	0.0	0.0	0.0	x	
	Conventional Boiler Use		0.0	X	0.0	0.0	0.0	X	
	CHP and/or Cogeneration Process		X	X	0.0	0.0	0.0	X	
	Direct Uses-Total Process		0.0	X	0.0	0.0	0.0	X	
	Process Heating		0.0	Х	X	0.0	0.0	X	
	Process Cooling and Refrigeration		0.0	X	X	0.0	0.0	X	
	Machine Drive		0.0	Х	0.0	D	Х	Х	
	Electro-Chemical Processes		0.0						
	Other Process Use		0.0	Х	0.0	D	0.0	X	
	Direct Uses-Total Nonprocess		0.0	X	0.0	0.0	0.0	Х	
	Facility HVAC (g)		0.0	X	0.0	0.0	0.0	X	
	Facility Lighting		0.0						
	Other Facility Support		0.0	X	X	0.0	0.0	X	
	Onsite Transportation		0.0		0.0	X	0.0		
	Conventional Electricity Generation			X	0.0	0.0	X	X	
	Other Nonprocess Use		0.0	X	0.0	0.0	X	X	
	End Use Not Reported	0	X	X	X	X	0	X	0
325120	Industrial Gases								
	TOTAL FUEL CONSUMPTION	1.9	3.8	X	0	1.9	70.3	X	5.3
	Indirect Uses-Boiler Fuel		14.6	X	0.0	0.1	X	X	
	Conventional Boiler Use		14.6	X	0.0	0.9	X	X	
	CHP and/or Cogeneration Process		X	X	X	0.1	X	X	
	Direct Uses-Total Process		3.7	X	0.0	8.0	40.4	X	
	Process Heating		22.1	Х	Х	4.6	Х	Х	
	Process Cooling and Refrigeration		22.5	Х	X	34.3	40.4	Х	
	Machine Drive		3.7	Х	0.0	Х	Х	Х	
	Electro-Chemical Processes		0.1						
	Other Process Use		0.1	X	X	10.0	X	X	
	Direct Uses-Total Nonprocess		8.5	X	0.0	26.9	81.0	Х	
	Facility HVAC (g)		6.4	X	X	25.8	0.0	X	
	Facility Lighting		34.9						
	Other Facility Support		24.4	X	X	38.0	X	X	
	Onsite Transportation		0.4		0.0	X	68.0		
	Conventional Electricity Generation			X	X	X	X	X	
	Other Nonprocess Use		70.7	X	X	18.8	94.1	X	
	End Use Not Reported	5.2	3.1	X	0.0	X	65.0	X	5.3

TOTAL FUEL CONCUMPTION	0.1	2.0	······································	2 2	4.0	0.2	0.0	41.6
TOTAL FUEL CONSUMPTION	9.1	2.0	X	3.2	4.0	9.2 0.0	0.0	41.6
Indirect Uses-Boiler Fuel		3.2	X	0.5	0.5			
Conventional Boiler Use		3.2	X	1.5	2.3	0.0	0.0	
CHP and/or Cogeneration Process		X	X	0.3	0.4	0.0	0.0	
Direct Uses-Total Process		2.0	X	2.3	7.6	8.5	0.0	
Process Heating		4.2	X	X	15.1	8.5 X	0.0	-
Process Cooling and Refrigeration		4.9	X	X	32.1		X	
Machine Drive		8.4	X	3.0	1.5	0.0	X	
Electro-Chemical Processes		0.5					 	-
Other Process Use		1.4	X	0.4	11.9	52.0	X	- -
Direct Uses-Total Nonprocess		10.1	X	4.4	16.1 8.5	19.3 29.9	X	
Facility HVAC (g)		13.7	X	0.0			X	
Facility Lighting		7.5	 			 	 	
Other Facility Support		17.0	X	0.0	7.8	X 25.0	X	- -
Onsite Transportation		55.2		5.8	51.7	26.0		
Conventional Electricity Generation			X	38.9	85.7	X	X	
Other Nonprocess Use		25.5	X	48.7	81.0	3.8	X	
End Use Not Reported	38.9	0.0	X	X	0.1	44.8	X	41.6
25193 Ethyl Alcohol								
TOTAL FUEL CONSUMPTION	1.3	1.9	X	2.8	1.5	8.6	0.0	3.7
Indirect Uses-Boiler Fuel		10	Х	Х	2	16.2	0	
Conventional Boiler Use		10	Х	Х	2.8	0	Х	
CHP and/or Cogeneration Process		X	Х	Х	4.1	31.3	0	
Direct Uses-Total Process		1.7	Х	2.0	2.4	6.2	Х	
Process Heating		12.9	Х	Х	2.5	10.3	Х	
Process Cooling and Refrigeration		4.4	Х	0.0	7.8	X	Х	
Machine Drive		1.6	Х	2.2	2.2	2.1	Х	
Electro-Chemical Processes		53.7						
Other Process Use		25.2	Х	0.0	15.9	X	Х	
Direct Uses-Total Nonprocess		6.9	Х	3.3	7.4	5.4	Х	
Direct Oses-Total Notipiotess		5.0	Х	72.0	5.9	19.3	Х	
Facility HVAC (g)		5.9						
			Х	0.0	10.9	0.0	Х	
Facility HVAC (g)		12.1	^					
Facility HVAC (g) Facility Lighting		12.1 57.1		3.4	0.0	4.2		
Facility HVAC (g) Facility Lighting Other Facility Support					0.0	4.2 X	 X	
Facility HVAC (g) Facility Lighting Other Facility Support Onsite Transportation	 	57.1		3.4				
Facility HVAC (g) Facility Lighting Other Facility Support								

TOTAL FUEL (CONSUMPTION	0.0	0.0	X	0.0	0.0	0.0	X	0.0
Indirect Uses	-Boiler Fuel		0.0	X	0.0	0.0	0.0	X	
Conventiona			0.0	X	0.0	0.0	0.0	X	
CHP and/or	Cogeneration Process		X	X	0.0	0.0	X	X	
Direct Uses-T	otal Process		0.0	X	0.0	0.0	0.0	X	
Process Hea			0.0	X	0.0	0.0	0.0	X	
Process Coo	ling and Refrigeration		0.0	X	X	0.0	X	X	
Machine Dri	ve		0.0	X	0.0	X	0.0	X	
Electro-Cher	mical Processes		0.0						
Other Proce	ss Use		0.0	X	X	0.0	X	X	
Direct Uses-T	otal Nonprocess		0.0	X	0.0	0.0	0.0	X	
Facility HVA	C (g)		0.0	X	0.0	0.0	0.0	X	
Facility Light	ing		0.0						
Other Facilit	y Support		0.0	X	X	0.0	0.0	X	
Onsite Trans	portation		0.0		0.0	0.0	0.0		
Conventiona	l Electricity Generation			X	0.0	X	X	X	
Other Nonpi	rocess Use		0.0	X	0.0	X	X	X	
End Use Not	Reported	0.0	0.0	X	X	0.0	0.0	X	0.0
325199 Other Basic	Organic Chemicals								
TOTAL FUEL (CONSUMPTION	4.1	5.9	0.0	9.2	6.0	8.3	1.6	6.3
Indirect Uses	-Boiler Fuel		4.9	0.0	39.2	5.9	18.8	1.1	
Conventiona	al Boiler Use		4.9	0.0	0.4	7.4	0.0	0.0	
CHP and/or	Cogeneration Process		Х	0.0	57.3	8.4	84.8	1.2	
Direct Uses-T	otal Process		6.5	X	10.0	7.6	3.3	3.0	
Process Hea	ting		9.9	X	29.1	6.3	3.4	87.5	
Process Coo	ling and Refrigeration		5.7	X	5.0	37.4	33.4	X	
Machine Dri	ve		7.4	X	2.9	16.1	17.8	X	
Electro-Cher	mical Processes		4.7						
Other Proces	ss Use		0.8	Х	0.1	17.5	60.5	0.0	
Direct Uses-T	otal Nonprocess		12.0	Х	7.0	15.3	16.9	Х	
Facility HVA	C (g)		10.3	Х	Х	6.4	37.0	X	
Facility Light	ing		9.2						
Other Facilit	y Support		30.4	Х	0.8	37.3	46.0	X	
Onsite Trans	portation		39.2		7.7	46.0	18.8		
Conventiona	l Electricity Generation			Х	0.1	5.2	0.0	X	
Other Nonpi	rocess Use		0.7	Х	30.4	0.0	0.0	X	
End Use Not	Reported	6.1	17.8	X	X	0.4	0.0	X	6.3
325211 Plastics Mat	erials and Resins								

	TOTAL FUEL CONSUMPTION	1.3	3.4	X	D	1.1	D	D	3.5
	Indirect Uses-Boiler Fuel		8.1	Х	0.1	1.3	65.7	X	
	Conventional Boiler Use		8.1	Х	0.1	9.4	0.0	X	
	CHP and/or Cogeneration Process		Х	Х	0.0	0.4	87.8	X	
	Direct Uses-Total Process		3.4	X	D	1.8	D	D	
	Process Heating		13.2	X	D	2.9	78.2	D	
	Process Cooling and Refrigeration		13.6	X	21.4	0.1	X	X	
	Machine Drive		3.8	X	13.3	0.5	9.4	X	
	Electro-Chemical Processes		0.2						
	Other Process Use		8.7	Х	51.7	1.7	D	X	
	Direct Uses-Total Nonprocess		9.4	X	4	8.6	8.9	Х	
	Facility HVAC (g)		14.1	Х	68.1	11.4	15.4	X	
	Facility Lighting		8.3						
	Other Facility Support		6.6	Х	0	3.2	1.4	X	
	Onsite Transportation		8.9		4.2	26.8	11.8		
	Conventional Electricity Generation			Х	12.7	92.5	Х	X	
	Other Nonprocess Use		31.9	Х	0.2	0.1	6.8	X	
	End Use Not Reported	3.4	56.6	X	0.0	33.0	20.6	X	3.5
325212	Synthetic Rubber								
	TOTAL FUEL CONSUMPTION	0.0	0.0	X	0.0	0.0	0.0	0.0	0.0
	Indirect Uses-Boiler Fuel		0.0	X	0.0	0.0	0.0	0.0	
	Conventional Boiler Use		0.0	X	0.0	0.0	0.0	0.0	
	CHP and/or Cogeneration Process		X	X	0.0	0.0	X	0.0	
	Direct Uses-Total Process		0.0	Х	0.0	0.0	0.0	Х	
	Process Heating		0.0	Х	X	0.0	0.0	Х	
	Process Cooling and Refrigeration		0.0	X	X	0.0	0.0	Х	
	Machine Drive		0.0	Х	0.0	0.0	0.0	Х	
	Electro-Chemical Processes		0.0						
	Other Process Use		0.0	X	0.0	0.0	0.0	X	
	Direct Uses-Total Nonprocess		0.0	X	0.0	0.0	0.0	Х	
	Facility HVAC (g)		0.0	Х	Х	0.0	0.0	X	
	Facility Lighting		0.0						
	Other Facility Support		0.0	Х	0.0	0.0	0.0	X	
	Onsite Transportation		0.0		0.0	0.0	0.0		
	Conventional Electricity Generation			X	0.0	Х	Х	X	
	Other Nonprocess Use		0.0	X	0.0	0.0	X	X	
	End Use Not Reported	0.0	0.0	X	X	0.0	0.0	X	0.0
325220	Artificial and Synthetic Fibers and Filaments								
	TOTAL FUEL CONSUMPTION	0.0	0.0	X	0.0	0.0	0.0	0.0	0.0
	Indirect Uses-Boiler Fuel		0.0	X	0.0	0.0	0.0	0.0	

	Conventional Boiler Use		0.0	X	0.0	0.0	0.0	X	
	CHP and/or Cogeneration Process		X	X	X	0.0	0.0	0.0	
	Direct Uses-Total Process		0.0	X	0.0	0.0	0.0	X	
	Process Heating		0.0	X	0.0	0.0	0.0	X	
	Process Cooling and Refrigeration		0.0	X	Х	Х	Х	X	
	Machine Drive		0.0	X	0.0	0.0	0.0	X	
	Electro-Chemical Processes		0.0						
	Other Process Use		0.0	X	Х	0.0	0.0	X	
	Direct Uses-Total Nonprocess		0.0	X	0.0	0.0	0.0	X	
	Facility HVAC (g)		0.0	X	Х	0.0	0.0	X	
	Facility Lighting		0.0						
	Other Facility Support		0.0	X	Х	0.0	0.0	X	
	Onsite Transportation		0.0		0.0	Х	0.0		
	Conventional Electricity Generation			X	X	X	X	X	
	Other Nonprocess Use		0.0	X	0.0	X	0.0	X	
	End Use Not Reported	0.0	0.0	X	X	X	0.0	X	0.0
325311	Nitrogenous Fertilizers								
	TOTAL FUEL CONCUMENTION	2.0	12 5		2.7	2.2	0.C. F.		0.7
	TOTAL FUEL CONSUMPTION	3.8	12.5	X	2.7 0.0	3.2	86.5 0.0	X	0.7
	Indirect Uses-Boiler Fuel		0.9	X		0.3		X	
	Conventional Boiler Use		0.9	X	0.0	0.5	0.0	X	
	CHP and/or Cogeneration Process		X	X	0.0	0.1	X	X	
	Direct Uses-Total Process		12.8	X		4.1	29.3 40.7	X	
	Process Heating		11.1	X	X	4.9		X	
	Process Cooling and Refrigeration		13.1	X	X	X	X	X	
	Machine Drive		11.5	X	0.0	4.4	0.0	X	
	Electro-Chemical Processes		71.4						
	Other Process Use		80.7	X	0.0	0.1	X	X	
	Direct Uses-Total Nonprocess		13.4	X	6.1	36.5	89.2	X	
	Facility HVAC (g)		6.7	X	0.0	36.8	0.0	X	
	Facility Lighting		18.7						
	Other Facility Support		32.2	X	X	43.0	0.0	X	
	Onsite Transportation		47.0		10.2	X	89.7		
	Conventional Electricity Generation			X	68.4	76.6	X	X	
	Other Nonprocess Use		0.0	X	0.5	X	X	X	
	End Use Not Reported	0.7	X	X	X	X	47.5	X	0.7
225212	Dhomhatic Fortilizar								
325312	Phosphatic Fertilizers								
	TOTAL FUEL CONSUMPTION	0.0	D	0.0	D	0.0	0.0	D	0.0
	Indirect Uses-Boiler Fuel		0.0	X	0.0	0.0	0.0	X	
	Conventional Boiler Use		0.0	X	X	0.0	0.0	X	
	CHP and/or Cogeneration Process		X	X	0.0	0.0	0.0	X	

	Direct Uses-Total Process		D	0.0	D	0.0	0.0	D	
	Process Heating		0.0	0.0	D	0.0	0.0	D	
	Process Cooling and Refrigeration		0.0	Х	Х	Х	X	Х	
	Machine Drive		D	Х	0.0	0.0	0.0	Х	
	Electro-Chemical Processes		Х						
	Other Process Use		Х	Х	0.0	0.0	X	Х	
	Direct Uses-Total Nonprocess		0.0	Х	0.0	0.0	0.0	Х	
	Facility HVAC (g)		0.0	Χ	0.0	0.0	0.0	X	
	Facility Lighting		0.0						
	Other Facility Support		0.0	X	0.0	0.0	0.0	X	
	Onsite Transportation		0.0		0.0	Х	0.0		
	Conventional Electricity Generation			Х	0.0	X	X	Х	
	Other Nonprocess Use		Х	Х	0.0	X	X	Х	
	End Use Not Reported	0.0	Х	Х	X	X	0.0	Х	0.0
3254	Pharmaceuticals and Medicines								
	TOTAL FUEL CONSUMPTION	6	2.9	Х	2.6	5.2	25.5	0	36.1
	Indirect Uses-Boiler Fuel		8.7	Х	0.6	3.6	34.6	0	
	Conventional Boiler Use		8.7	X	0	6.4	41.8	0	
	CHP and/or Cogeneration Process		Х	Х	6.3	2.5	5.2	Х	
	Direct Uses-Total Process		1.6	Х	3.5	8.8	29.4	Х	
	Process Heating		2.9	X	0	10.1	28	Х	
	Process Cooling and Refrigeration		2.2	Х	5.2	13.1	X	Х	
	Machine Drive		2.3	X	0	26.5	95.4	Х	
	Electro-Chemical Processes		21						
	Other Process Use		3	Х	23	3.2	58.7	Х	
	Direct Uses-Total Nonprocess		5.1	Х	4.6	13.5	52.9	0	
	Facility HVAC (g)		5.4	Х	8	14	61	0	
	Facility Lighting		3.9						
	Other Facility Support		10	Х	0	6.2	43.9	Х	
	Onsite Transportation		6		4.4	18.8	17.9		
	Conventional Electricity Generation			X	3.4	41	0	Х	
	Other Nonprocess Use		9.8	X	6	1.1	14.3	Х	
	End Use Not Reported	33.5	25.6	X	X	10.6	35.9	Х	36.1
325412	Pharmaceutical Preparation								
	TOTAL FUEL CONSUMPTION	9.7	1.7	X	2.9	9.6	30.1	0	39.9
	Indirect Uses-Boiler Fuel		13.3	Х	0.7	3	43.4	0	
	Conventional Boiler Use		13.3	Х	0	2.4	43.4	0	
	CHP and/or Cogeneration Process		Х	Х	11.5	7.8	0	X	
	Direct Uses-Total Process		1.7	X	3.8	12.2	34.9	X	
	Process Heating		2.9	X	0	14.8	36.1	X	

	Process Cooling and Refrigeration		2.3	Х	0	15.1	Х	Х	
	Machine Drive		2.5	X	0	31.9	95.4	X	
	Electro-Chemical Processes		38.3						
	Other Process Use		1.8	X	30	3.9	58.7	X	
	Direct Uses-Total Nonprocess		2	X	5.3	21.1	57.5	0	
	Facility HVAC (g)		2.2	X	8.2	22.1	61.1	0	
	Facility Lighting		2.3						
	Other Facility Support		5.7	Х	0	9.2	65.3	X	
	Onsite Transportation		6.7		8.8	20.1	19.7		
	Conventional Electricity Generation			Х	4.2	43.3	Х	Х	
	Other Nonprocess Use		4.1	Х	6.4	1.4	0	Х	
	End Use Not Reported	38.6	0	X	X	0	50.6	X	39.9
325992	Photographic Film, Paper, Plate, and Chemicals								
	TOTAL FUEL CONSUMPTION	0.2	0.3		0.1	0.4	1 E		
	Indirect Uses-Boiler Fuel	0.2	0.3	0	0.1	0.4	1.5 X	X X	
	Conventional Boiler Use		0	X	0	0.7	X	X	
	CHP and/or Cogeneration Process		X	0	0	0.7	X	X	
	Direct Uses-Total Process		0.1	X	0	0.7	0	X	
	Process Heating		0.3	X	0	0.7	X	X	
	Process Cooling and Refrigeration		0.2	X	0	0.7	X	X	
	Machine Drive		0.2	X	0	0	0	X	
	Electro-Chemical Processes		0						
	Other Process Use		0	X	0	0.6	X	X	
	Direct Uses-Total Nonprocess		0.6	X	0.1	1.1	5.3	X	
	Facility HVAC (g)		0.6	X	0	1.3	X	X	
	Facility Lighting		0.8						
	Other Facility Support		1.5	X	0	0	0	X	
	Onsite Transportation		0		0	X	19.6		
	Conventional Electricity Generation			X	51.6	0	X	X	
	Other Nonprocess Use		0	X	0	0	0	X	
	End Use Not Reported	0.1	0	X	X	0	0.1	X	0
326	PLASTICS AND RUBBER PRODUCTS								
	TOTAL FUEL CONSUMPTION	7.8	7.7	72.4	64.9	14.3	17.3	X	35.2
	Indirect Uses-Boiler Fuel		59.1	72.4	59.5	24.3	19.5	X	
	Conventional Boiler Use		59.1	72.4	80.3	33.6	72.1	Х	
	CHP and/or Cogeneration Process		Х	Х	82	33.4	0	Х	
	Direct Uses-Total Process		8.3	Х	84.3	19.7	52.3	Х	
	Process Heating		17.4	Х	99	20.8	67.7	Х	
	Process Cooling and Refrigeration		13.9	Х	Х	95.4	Х	Х	
	Machine Drive		9.4	Х	64.6	63.4	73.7	Х	

	Electro-Chemical Processes		54						
	Other Process Use		45.9	X	57.5	56.5	14	X	
	Direct Uses-Total Nonprocess		9.7	X	43	19.5	16.2	X	
	Facility HVAC (g)		10	X	X	20.4	61.6	X	
	Facility Lighting		9.7						
	Other Facility Support		15.8	X	X	32.9	95.2	X	
	Onsite Transportation		20.5		53	89.9	16.9		
	Conventional Electricity Generation			X	67.7	95.9	X	X	
	Other Nonprocess Use		90.7	X	55.8	X	94	X	
	End Use Not Reported	67.5	74.6	X	X	X	76.4	X	35.2
		07.3					70.1		
327	NONMETALLIC MINERAL PRODUCTS								
	TOTAL FUEL CONSUMPTION	2.9	2.5	97.3	16.7	1.7	27.5	7.5	3.2
	Indirect Uses-Boiler Fuel		13.1	X	88.1	17	12.8	0	
	Conventional Boiler Use		13.1	X	47.9	30	0.1	0	
	CHP and/or Cogeneration Process		X	X	99	19.6	65.2	0	
	Direct Uses-Total Process		2.6	97.3	28	1.6	51.5	7.5	
	Process Heating		2.9	97.3	58.3	1.3	57.7	0.2	
	Process Cooling and Refrigeration		7.8	X	X	21.6	X	4.9	
	Machine Drive		2.8	97.3	31.9	6.8	63	0	
	Electro-Chemical Processes		1.5						
	Other Process Use		25.8	X	42	54.8	44.6	76.3	
	Direct Uses-Total Nonprocess		4.1	X	19.1	7.8	11.5	0	
	Facility HVAC (g)		4.3	X	51.6	8.3	38.2	X	
	Facility Lighting		4.9						
	Other Facility Support		6.9	X	83.9	9.8	64.6	0	
	Onsite Transportation		8.9		19.2	42.8	11.4		
	Conventional Electricity Generation			X	74.9	70.9	0	X	
	Other Nonprocess Use		27.5	X	57.4	26.1	66.7	X	
	End Use Not Reported	3.1	24.9	X	X	13.3	91	X	3.2
327120	Clay Building Material and Refractories								
	TOTAL FUEL CONCUMPTION	2	2.6		2.2	2.2	F.F.		24.0
	TOTAL FUEL CONSUMPTION	2	3.6	X	2.2	2.2	5.5	0	24.8
	Indirect Uses-Boiler Fuel		35.2	X	X	8.4	0	X	
	Conventional Boiler Use		35.2	X	X	2.7	0	X	
	CHP and/or Cogeneration Process		X	X	X	8.7	X	X	
	Direct Uses-Total Process		3.2	X	10	1.9	8.1	0	
	Process Heating		3.6	X	0.1	2	0.3	0	
	Process Cooling and Refrigeration		12.2	X	X	X	X	X	
	Machine Drive		3.8	X	16.1	15.7	70	X	
	Electro-Chemical Processes		X		-				
	Other Process Use		58.2	X	0	9.9	72.5	0	

	Direct Uses-Total Nonprocess		7	X	2.2	9.5	6.9	Χ	
	Facility HVAC (g)		6	X	35.5	10	30.2	Х	
	Facility Lighting		9.9						
	Other Facility Support		8.8	X	0	17.4	X	X	
	Onsite Transportation		13.1		2.2	0.1	5.8		
	Conventional Electricity Generation			X	0.4	X	X	X	
	Other Nonprocess Use		49.2	X	8.5	X	0	X	
	End Use Not Reported	24.2	8.2	X	X	X	8.1	X	24.8
327211	Flat Glass								
	TOTAL FUEL CONSUMPTION	0.0	0.0	X	0.0	0.0	0.0	X	0.0
	Indirect Uses-Boiler Fuel		0.0	X	Х	0.0	X	X	
	Conventional Boiler Use		0.0	X	Х	0.0	X	Х	
	CHP and/or Cogeneration Process		Х	X	Х	0.0	X	Х	
	Direct Uses-Total Process		0.0	X	0.0	0.0	0.0	Х	
	Process Heating		0.0	X	Х	0.0	0.0	Х	
	Process Cooling and Refrigeration		0.0	X	Х	X	X	X	
	Machine Drive		0.0	X	0.0	0.0	0.0	Х	
	Electro-Chemical Processes		0.0						
	Other Process Use		0.0	X	0.0	0.0	X	Х	
	Direct Uses-Total Nonprocess		0.0	X	0.0	0.0	0.0	X	
	Facility HVAC (g)		0.0	X	Х	0.0	X	Х	
	Facility Lighting		0.0						
	Other Facility Support		0.0	X	Х	0.0	X	Х	
	Onsite Transportation		0.0		0.0	Х	0.0		
	Conventional Electricity Generation			X	0.0	Х	X	Х	
	Other Nonprocess Use		0.0	X	0.0	0.0	X	Х	
	End Use Not Reported	0.0	0.0	X	X	X	0.0	X	0.0
227242	Other Dressed and Blaum Class and Classical								
327212	Other Pressed and Blown Glass and Glassware								
	TOTAL FUEL CONSUMPTION	0.6	0.8	X	0.7	0.7	27.7	X	0.1
	Indirect Uses-Boiler Fuel		17.5	X	0.0	3.9	44.6	X	
	Conventional Boiler Use		17.5	X	0.0	2.6	X	X	
	CHP and/or Cogeneration Process		X	X	X	5.2	44.6	X	
	Direct Uses-Total Process		0.5	X	0.0	0.7	37.2	X	
	Process Heating		0.8	X	0.0	0.7	40.1	X	
	Process Cooling and Refrigeration		0.5	X	X	9.8	X	X	
	Machine Drive		1.0	X	0.0	0.3	0.3	X	
	Electro-Chemical Processes		1.7						
	Other Process Use		0.4	X	0.0	0.0	0.0	X	
	Direct Uses-Total Nonprocess		2.3	X	0.9	2.1	24.5	X	
	Facility HVAC (g)		3.1	X	X	2.2	71.6	X	

	Facility Lighting		1.9						
	Other Facility Support		3.4	X	X	1.8	73.7	X	
	Onsite Transportation		5.0		0.5	X	16.1		
	Conventional Electricity Generation			X	0.0	91.9	Χ	X	
	Other Nonprocess Use		0.0	X	24.7	X	0.0	X	
	End Use Not Reported	0.1	X	X	X	X	10.3	X	0.1
327213	Glass Containers								
	TOTAL FUEL CONSUMPTION	0.0	0.0	X	0.0	0.0	0.0	X	0.0
	Indirect Uses-Boiler Fuel		0.0	X	X	0.0	X	Х	
	Conventional Boiler Use		0.0	X	X	Х	X	Х	
	CHP and/or Cogeneration Process		X	X	X	0.0	X	Х	
	Direct Uses-Total Process		0.0	X	0.0	0.0	0.0	X	
	Process Heating		0.0	X	X	0.0	0.0	X	
	Process Cooling and Refrigeration		0.0	X	X	0.0	Х	X	
	Machine Drive		0.0	X	0.0	0.0	X	X	
	Electro-Chemical Processes		0.0						
	Other Process Use		0.0	X	X	X	Χ	X	
	Direct Uses-Total Nonprocess		0.0	X	0.0	0.0	0.0	Х	
	Facility HVAC (g)		0.0	X	X	0.0	0.0	X	
	Facility Lighting		0.0						
	Other Facility Support		0.0	X	X	0.0	Χ	X	
	Onsite Transportation		0.0		0.0	Х	0.0		
	Conventional Electricity Generation			X	0.0	X	X	X	
	Other Nonprocess Use		0.0	Х	Х	0.0	X	X	
	End Use Not Reported	0.0	0.0	X	X	0.0	X	X	0.0
327215	Glass Products from Purchased Glass								
32/213	Glass Floudets Holli Fulcilased Glass								
	TOTAL FUEL CONSUMPTION	1.0	1.4	X	26.8	1.1	1.9	X	0.2
	Indirect Uses-Boiler Fuel		14.8	X	54.8	1.2	0.1	X	
	Conventional Boiler Use		14.8	X	54.9	0.7	0.1	X	
	CHP and/or Cogeneration Process		X	X	0.0	1.5	0.0	X	
	Direct Uses-Total Process		1.6	X	0.0	1.2	1.4	X	
	Process Heating		2.9	X	X	1.4	0.1	X	
	Process Cooling and Refrigeration		1.2	X	X	70.0	X	X	
	Machine Drive		1.2	X	0.0	0.6	0.3	X	
	Electro-Chemical Processes		0.1						
	Other Process Use		1.5	X	0.0	0.5	81.4	X	
	Direct Uses-Total Nonprocess		1.8	X	30.0	3.7	2.5	X	
	Facility HVAC (g)		2.3	X	45.0	4.1	0.0	X	
	Facility Lighting		4.1						
	Other Facility Support		2.0	X	91.2	5.4	75.8	X	

	Onsite Transportation		1.3		5.7	62.3	2.9		
	Conventional Electricity Generation			X	0.0	0.0	0.0	X	
	Other Nonprocess Use		1.2	X	1.1	0.2	5.1	X	
	End Use Not Reported	3.1	18.3	X	X	0.0	45.9	X	0.2
327310	Cements								
	TOTAL FUEL CONSUMPTION	0.4	0.3	X	0.3	1.2	1.1	0.3	0.3
	Indirect Uses-Boiler Fuel		0	X	X	0	X	0	
	Conventional Boiler Use		0	Х	X	0	Х	0	
	CHP and/or Cogeneration Process		Х	Х	X	0	Х	0	
	Direct Uses-Total Process		0.3	Х	0.1	1.2	8.7	0.3	
	Process Heating		1	Х	0	0.2	0	0.3	
	Process Cooling and Refrigeration		0.8	Х	Х	23.5	X	4.9	
	Machine Drive		0.4	Х	0.1	0	12.3	0	
	Electro-Chemical Processes		0						
	Other Process Use		0	X	43	X	X	X	
	Direct Uses-Total Nonprocess		1.4	Х	0.5	3.4	0.1	0	
	Facility HVAC (g)		1.3	Х	0	3.8	0	X	
	Facility Lighting		2.1						
	Other Facility Support		1.1	X	X	0.1	0	0	
	Onsite Transportation		0		0.5	X	0.2		
	Conventional Electricity Generation			X	0	X	X	X	
	Other Nonprocess Use		0	X	0	X	1.2	X	
	End Use Not Reported	0.3	0	X	X	0	X	X	0.3
327410	Lime								
	TOTAL FUEL CONCUMENTION								
	TOTAL FUEL CONSUMPTION	0.0	0.0	X	0.0	0.0	0.0	0.0	0.0
	Indirect Uses-Boiler Fuel		0.0	X	X X	0.0	X X	X	
	Conventional Boiler Use			X	X		X	X	
	CHP and/or Cogeneration Process		X	X X	0.0	X	0.0	0.0	
	Direct Uses-Total Process		0.0			0.0	0.0		
	Process Heating Process Cooling and Refrigeration		0.0	X	0.0	0.0		0.0 X	
	Machine Drive		0.0	X X	0.0	0.0	X 0.0	X	
	Electro-Chemical Processes					0.0		^	
	Other Process Use		0.0		0.0	X	X		
				X	0.0	0.0	0.0	X	
	Direct Uses-Total Nonprocess		0.0	X X	V.0		0.0	X X	
	Facility HVAC (g) Facility Lighting		0.0		<u>^</u>	0.0			
			0.0		X	0.0	0.0	X	
	Other Facility Support Onsite Transportation		0.0	X	0.0	X	0.0		-
				X	V.0	X	0.0 X	X	
	Conventional Electricity Generation			^	^		Λ	Λ	

	Other Nonprocess Use		0.0	Χ	Х	X	0.0	Х	
	End Use Not Reported	0.0	Х	X	X	Х	Х	Х	0.0
327420	Gypsum								
	TOTAL FUEL CONSUMPTION	1.0	2.0	X	47.3	0.5	1.4	X	0.0
	Indirect Uses-Boiler Fuel		0.0	X	X	0.0	X	X	
	Conventional Boiler Use		0.0	X	X	0.0	X	X	
	CHP and/or Cogeneration Process		X	X	X	0.0	X	X	
	Direct Uses-Total Process		2.3	X	75.4	0.5	X	X	
	Process Heating		17.0	X	72.8	0.5	X	X	
	Process Cooling and Refrigeration		3.5	X	X 70.2	0.0	X	X	
	Machine Drive		2.3	X	78.2	0.0	X	X	
	Electro-Chemical Processes		X			 	X		
	Other Process Use		51.8 1.8	X	X 37.9	X 2.9	1.4	X	-
	Direct Uses-Total Nonprocess Facility HVAC (g)		2	X	0	3.8	0	X X	
			1.5						
	Facility Lighting Other Facility Support		4.9		0	0.3	X	X	
	Other Facility Support Onsite Transportation		4.9	X	17.8	0.3	1.4		
	Conventional Electricity Generation			X	87.6	X	X X	X	
	Other Nonprocess Use		0	x	57.2	X	57.9	x	
	End Use Not Reported	0.4	0	^	X X	14.4	0	X	0
	Liu Ose Not Reported	0.4		X	X			X	
327993	Mineral Wool								
	TOTAL FUEL CONSUMPTION	0.7	0.4	X	0.1	1	6.3	0	0.1
	Indirect Uses-Boiler Fuel		16.6	X	X	20.4	X	X	
	Conventional Boiler Use		16.6	X	X	0	X	X	
	CHP and/or Cogeneration Process		X	X	X	23.7	X	X	
	Direct Uses-Total Process		0.4	X	0.1	0.7	0.4	0	
	Process Heating		0.8	X	0	0.7	0	0	
	Process Cooling and Refrigeration		0.3	X	X	0	X	X	
	Machine Drive		0.5	X	0.1	2.3	5.5	X	
	Electro-Chemical Processes		2.2						
	Other Process Use		0	X	0	0	X	X	
	Direct Uses-Total Nonprocess		0.9	X	0.1	2	7.2	X	
	Facility HVAC (g)		1.5	X	0.4	2.4	0	X	
	Facility Lighting		0.7						
	Other Facility Support		1.2	X	0.1	0.5	X	X	
	Onsite Transportation		5.9		0	0	7.2		
	Conventional Electricity Generation			X	0	0	X	X	
	Other Nonprocess Use		5.9	X	0	X	X	X	
	End Use Not Reported	0.1	0	X	X	X	X	X	0.1

331	PRIMARY METALS								
	TOTAL FUEL CONSUMPTION	0.2	1 1	0.2		0.2	2.2	0.1	0.1
		0.3	1.1 5.2	0.3	0.9	0.2	2.2 2.4	0.1 X	0.1
	Indirect Uses-Boiler Fuel Conventional Boiler Use		5.2	0	0	0.3	2.5	X	-
	CHP and/or Cogeneration Process		3.2 X	0	0	0.3	4.1	X	-
	Direct Uses-Total Process		0.9	89.7	0.5	0.7	1.7	0.1	
	Process Heating		1.3	X	5.2	0.2	2	0.1	
	Process Cooling and Refrigeration		0.6	x	0	0.2	0.6	X	
	Machine Drive		1.5	89.7	0.3	5.2	5.1	X	
	Electro-Chemical Processes		0.2	65.7	0.3			-	
	Other Process Use		0.4	χ	0	0.3	3.6	0	
	Direct Uses-Total Nonprocess		2.7	X	1.1	0.5	3.6	X	
	Facility HVAC (g)		3.1	X	4	0.7	19	X	
	Facility Lighting		3.1		4			-	
	Other Facility Support		1.3	X	8.5	1.1	3.8	X	
						2.1	2.8		
	Onsite Transportation Conventional Electricity Generation		2		0.3	1.4	8.3		-
				X		0.1	0.7	X	-
	Other Nonprocess Use End Use Not Reported	0.1	4.3 5.9	X X	2.2 X	2.2	5.8	X	0.1
	Ella Ose Not Reportea	0.1	3.9	^			5.0		0.1
331110	Iron and Steel Mills and Ferroalloys								
331110	Tion and Sect Hills and Ferrodicy's								
	TOTAL FUEL CONSUMPTION	0	0	0	0	0	0	0	0
	Indirect Uses-Boiler Fuel		0	0	0	0	0	X	
	Conventional Boiler Use		0	0	X	0	X	X	
	CHP and/or Cogeneration Process		Х	0	0	0	0	X	
	Direct Uses-Total Process		0	X	0	0	0	0	
	Process Heating		0	X	0	0	0	0	
	Process Cooling and Refrigeration		0	X	X	0	0	X	
	Machine Drive		0	X	0	0	0	X	
	Electro-Chemical Processes		0						
	Other Process Use		0	Х	0	0	0	0	
	Direct Uses-Total Nonprocess		0	Х	0	0	0	Х	
	Facility HVAC (g)		0	Х	0	0	0	Х	
	Facility Lighting		0						
	Other Facility Support		0	Х	0	0	0	Х	
	Onsite Transportation		0		0	0	0		
	Conventional Electricity Generation			Х	0	0	0	Х	
	Other Nonprocess Use		0	X	0	0	0	Х	
	End Use Not Reported	0	0	Х	Х	0	0	Х	0
	Steel Products from Purchased Steel								

	Conventional Electricity Generation Other Nonprocess Use		0.2	X	X 0	0.1 X	0	X	
	Other Facility Support Onsite Transportation		0.2	X 	9.7	0.6 27.8	2.3	X	
	Facility Lighting		0.2	 V				 	
	Facility HVAC (g)		0.4	X	0	0.3	0.1	X	
	Direct Uses-Total Nonprocess		0.2	X	0.9	0.3	1.2	X	
	Other Process Use		0.1	X	0	0.1	0	X	
	Electro-Chemical Processes		0						
	Machine Drive		0.3	X	0	3.5	0.1	X	
	Process Cooling and Refrigeration		0.8	X	X	6.3	0	X	
	Process Heating		1	X	0	0.5	1.7	X	
	Direct Uses-Total Process		0.1	X	0	0.5	1	X	
	CHP and/or Cogeneration Process		X	X	0	0.1	13.8	X	
	Conventional Boiler Use		0.1	X	X	0	0	Х	
	Indirect Uses-Boiler Fuel		0.1	Х	0	0.1	13.4	Х	
	TOTAL FUEL CONSUMPTION	0.2	0.1	X	0.7	0.4	1	x	
B	Alumina and Aluminum								
	End Use Not Reported	12.2	90.8	X	X	X	7.9	X	
	Other Nonprocess Use		4.1	X	X	X	73.7	X	
	Conventional Electricity Generation			X	0	3.2	63.9	X	
	Onsite Transportation		8.4		13.8	X	12.4		
	Other Facility Support		12.9	X	0	10.7	68.2	X	
	Facility Lighting		28.7						
	Facility HVAC (g)		29	Х	45.2	5.1	54.6	X	
	Direct Uses-Total Nonprocess		26	Х	13.7	4.8	17.3	Х	
	Other Process Use		5	X	0	0.5	50.7	Х	
	Electro-Chemical Processes		2.1						
	Machine Drive		15.7	Х	2.1	25.8	28.8	Х	
	Process Cooling and Refrigeration		2.2	X	X	0	0	X	
	Process Heating		30.9	X	0	3.4	33.2	0	
	Direct Uses-Total Process		16.4	X	2	3.3	20.7	0	
	CHP and/or Cogeneration Process		X	X	0	16.1	26	X	
	Conventional Boiler Use		42.2	X	X	6	72.5	X	
	TOTAL FUEL CONSUMPTION Indirect Uses-Boiler Fuel	9.7	17.6 42.2	X X	11.1	3.9 10.8	15.4 66.2	0 X	

	TOTAL FUEL CONSUMPTION	2.1	1.5	Χ	2.8	2.3	1.1	Х	2.8
	Indirect Uses-Boiler Fuel		0	Х	Х	0	Х	Х	
	Conventional Boiler Use		0	Х	Х	0	X	Х	
	CHP and/or Cogeneration Process		X	Х	Х	0	X	Х	
	Direct Uses-Total Process		1.6	Х	0	2.4	0	Х	
	Process Heating		3.7	Х	Х	2.4	0	Х	
	Process Cooling and Refrigeration		2.6	Х	Х	0	X	Х	
	Machine Drive		1.9	Х	0	0	0	Х	
	Electro-Chemical Processes		X						
	Other Process Use		0	Х	Х	0	0	Х	
	Direct Uses-Total Nonprocess		3.1	Х	3.4	1.8	1.3	Х	
	Facility HVAC (g)		4.8	Х	0	1.8	0.6	Х	
	Facility Lighting		1.7						
	Other Facility Support		3.3	Х	9.7	3.8	0	Х	
	Onsite Transportation		0		3.4	X	13.3		
	Conventional Electricity Generation			Х	Х	X	X	Х	
	Other Nonprocess Use		28.2	Х	0	X	0	Х	
	End Use Not Reported	2	X	Х	Х	X	1	Х	2.8
331315	Aluminum Sheet, Plate and Foils								
	TOTAL FUEL CONSUMPTION	0.0	0	X	0	0	0	X	0
	Indirect Uses-Boiler Fuel		0	X	0	0	X	X	
	Conventional Boiler Use		0	X	X	0	X	X	
	CHP and/or Cogeneration Process		X	X	0	0	X	X	
	Direct Uses-Total Process		0	X	0	0	0	X	-
	Process Heating		0	X	X	0	0	X	
	Process Cooling and Refrigeration		0	X	X	X	X	X	
	Machine Drive		0	X	0	0	0	X	
	Electro-Chemical Processes		0					 	
	Other Process Use		0	X	0	0	0	X	
	Direct Uses-Total Nonprocess	-	0	X	0	0	0	X	
	Facility HVAC (g)	-	0	X	X	0	X	X	
	Facility Lighting		0		 		 	 	
	Other Facility Support	-	0	X	X	0	X	X	
	Onsite Transportation	-	0		0	X	0	 	
	Conventional Electricity Generation			X	X	X	X	X	
	Other Nonprocess Use		X	X	0	X	0	X	
	End Use Not Reported	0	X	X	X	X	X	X	0
331318	Other Aluminum Rolling, Drawing and Extruding								
	TOTAL FUEL CONSUMPTION	0.6	1.2	X	0.3	0.4	2.3	X	0.8
	Indirect Uses-Boiler Fuel		0.3	X	X	0.5	13.6	X	
					·				

	Conventional Boiler Use		0.3	X	Х	0	0	Х	
	CHP and/or Cogeneration Process		Х	X	X	0.7	14	Χ	
	Direct Uses-Total Process		1.4	X	0	0.5	2.1	Χ	
	Process Heating		2.8	X	0	0.4	2.7	Χ	
	Process Cooling and Refrigeration		2	Х	Х	8.7	0	Χ	
	Machine Drive		1.2	Х	Х	4	0.1	Χ	
	Electro-Chemical Processes		0						
	Other Process Use		0.8	Х	Х	3.2	0	Х	
	Direct Uses-Total Nonprocess		0.8	Х	0.3	1.3	2.8	Х	
	Facility HVAC (g)		1	Х	0	1.3	0	Х	
	Facility Lighting		0.9						
	Other Facility Support		1.8	Х	Х	2.4	0	Х	
	Onsite Transportation		2		0.3	27.8	3		
	Conventional Electricity Generation			Х	Х	72.2	X	Х	
	Other Nonprocess Use		1.6	Х	Х	X	0	Х	
	End Use Not Reported	0.1	0	Х	Х	0	0	Х	0.8
3314	Nonferrous Metals, except Aluminum								
	TOTAL FUEL CONSUMPTION	1	0.9	X	5.2	1.3	1.9	X	7.5
	Indirect Uses-Boiler Fuel		3.3	X	0	1	0	X	
	Conventional Boiler Use		3.3	X	X	0.7	0	X	
	CHP and/or Cogeneration Process		X	X	0	1.4	0	X	
	Direct Uses-Total Process		0.8	X	1.7	1.6	0.8	X	
	Process Heating		1.7	X	0	1.6	0.2	X	
	Process Cooling and Refrigeration		1.5	X	Х	0	0	X	
	Machine Drive		1.7	X	2.3	15.3	6.3	X	
	Electro-Chemical Processes		0.9						
	Other Process Use		1.4	X	X	4.1	31.4	X	
	Direct Uses-Total Nonprocess		2.1	X	8.2	5.9	5	X	
	Facility HVAC (g)		2.1	X	0.6	6.1	21	X	
	Facility Lighting		2.1						
	Other Facility Support		5.2	X	60.2	7.5	4.6	X	
	Onsite Transportation		9		9.4	0	3.6		
	Conventional Electricity Generation			X	0.9	3.5	0	X	
	Other Nonprocess Use		0.3	X	0.1	14.2	43.8	X	
	End Use Not Reported	7.1	2	X	X	26.7	12.2	X	7.5
331410	Nonferrous Metal (except Aluminum) Smelting and Refining								
	TOTAL FUEL CONSUMPTION	0.8	0.6	X	0.2	1.3	3.1	X	0.1
	Indirect Uses-Boiler Fuel		0.0	x	0.2	0	0	X	
	Conventional Boiler Use		0	X	X	0	X	X	
			X	X	0	0	0	X	
	CHP and/or Cogeneration Process		х	х	U	U	U	Х	

Direct Uses-Total Process 0.6	
Machine Drive 1 X 0 0 0.7 X Electro-Chemical Processes 0.9	
Machine Drive 1 X 0 0 0.7 X Electro-Chemical Processes 0.9	
Other Process Use 1.6 X X X 0 0 X Direct Uses-Total Nonprocess 1.4 X 0.4 17.7 8.4 X Facility HVAC (g) 1.9 X 0 19.7 0 X Facility Lighting 1.5 <	
Direct Uses-Total Nonprocess 1.4 X 0.4 17.7 8.4 X Facility HVAC (g) 1.9 X 0 19.7 0 X Facility Lighting 1.5 <th></th>	
Direct Uses-Total Nonprocess 1.4 X 0.4 17.7 8.4 X Facility HVAC (g) 1.9 X 0 19.7 0 X Facility Lighting 1.5 <th></th>	
Facility HVAC (g) 1.9 X 0 19.7 0 X Facility Lighting 1.5 </th <th></th>	
Facility Lighting 1.5	
Other Facility Support 2.2 X 60.2 35.3 0 X Onsite Transportation 0 0.1 0 9.5 Conventional Electricity Generation X 2.9 0 X X	
Onsite Transportation 0 0.1 0 9.5 Conventional Electricity Generation X 2.9 0 X X	
Conventional Electricity Generation X 2.9 0 X X	
Other Nonprocess Use X X X 0 X 69.2 X	
End Use Not Reported 0.1 0 X X X 0 X	0.1
3315 Foundries	
TOTAL FUEL CONSUMPTION 0.9 0.9 89.7 1.6 0.9 1.8 0.9	4.2
Indirect Uses-Boiler Fuel 8.2 X 0 4.9 0 X	
Conventional Boiler Use 8.2 X 0 16.2 0 X	
CHP and/or Cogeneration Process X X X 0 4.7 0 X	
Direct Uses-Total Process 0.9 89.7 8.9 0.9 3.4 0.9	
Process Heating 1 X 12.9 1 4.4 45.8	
Process Cooling and Refrigeration 4.2 X 0 1.3 37.4 X	
Machine Drive 1.1 89.7 1.8 4.7 5.6 X	
Electro-Chemical Processes 42.7	
Other Process Use 2.5 X 0 7.2 0.6 0	
Direct Uses-Total Nonprocess 1.5 X 1.2 1.8 2.2 X	
Facility HVAC (g) 2 X 43.1 1.9 2.4 X	
Facility Lighting 1.1	
Other Facility Support 2.5 X 11.8 4.5 26.9 X	
Onsite Transportation 5.3 1 8.1 2.5	
Conventional Electricity Generation X 0 3.6 X X	
Other Nonprocess Use 40.9 X 15.4 1.7 6.7 X	
End Use Not Reported 3.9 7.6 X X 1 11.7 X	4.2
331511 Iron Foundries	
TOTAL FUEL CONSUMPTION 1.7 1.5 X 0.8 2 4.5 0	4.2
Indirect Uses-Boiler Fuel 14.5 X 0 27.3 0 X	
Conventional Boiler Use 14.5 X 0 0 0 X	
CHP and/or Cogeneration Process X X 0 35.2 X X	-
Direct Uses-Total Process 1.5 X 0.5 1.6 9.9 0	
Process Heating 1.3 X 0.1 1.9 19.4 X	

	Process Cooling and Refrigeration		1.8	Х	X	96.5	96.5	Х	
	Machine Drive		1.9	X	5.6	0.1	14.2	X	
	Electro-Chemical Processes		50.2						
	Other Process Use		3.3	X	Х	1.4	0.1	0	
	Direct Uses-Total Nonprocess		2.9	Х	0.9	3.4	4.9	Х	
	Facility HVAC (g)		4.5	X	8.9	3.5	1.7	X	
	Facility Lighting		2.0						
	Other Facility Support		4.5	Х	Х	2.8	23.0	Х	
	Onsite Transportation		10.9		0.9	49.4	6.8		
	Conventional Electricity Generation			X	0.0	X	Х	Х	
	Other Nonprocess Use		0.0	Х	36.4	0.0	7.4	Х	
	End Use Not Reported	4.1	0.0	X	X	0.0	14.0	X	4.2
331523	Nonferrous Metal Die-Casting Foundries								
	TOTAL FUEL CONSUMPTION	1.3	1.2	89.7	5.6	1.6	1.4	X	0.5
	Indirect Uses-Boiler Fuel		2.7	X	0.0	2.9	0.0	X	
	Conventional Boiler Use		2.7	X	0.0	8.8	0.0	X	
	CHP and/or Cogeneration Process		X	X	0.0	3.3	0.0	X	
	Direct Uses-Total Process		1.3	89.7	0.0	1.8	0.8	X	
	Process Heating		2.6	X	0.0	1.9	0.6	X	
	Process Cooling and Refrigeration		1.8	X	0.0	4.2	45.1	X	
	Machine Drive		1.7	89.7	0.0	10.5	14.9	X	
	Electro-Chemical Processes		4.1						
	Other Process Use		0.1	X	0.0	0.6	74.8	X	
	Direct Uses-Total Nonprocess		1.1	X	6.8	1.4	3.0	X	
	Facility HVAC (g)		0.9	X	0.0	1.5	1.5	X	
	Facility Lighting		1.4						
	Other Facility Support		3.5	X	0.0	4.9	58.3	Х	
	Onsite Transportation		4.7		10.4	14.7	3.1		
	Conventional Electricity Generation			Х	0.0	0.0	X	Х	
	Other Nonprocess Use		0.0	Х	0.0	X	X	X	
	End Use Not Reported	0.9	0.7	X	X	1.1	0.0	X	0.5
331524	Aluminum Foundries, except Die-Casting								
	TOTAL FUEL CONSUMPTION	1	1.1	X	1.6	1.3	2.9	X	3.3
	Indirect Uses-Boiler Fuel		4.4	X	X	0.1	0.0	X	
	Conventional Boiler Use		4.4	X	X	4.5	0.0	X	
	CHP and/or Cogeneration Process		X	Х	X	0.1	0.0	X	
	Direct Uses-Total Process		1.0	X	23.7	1.4	4.3	X	
	Process Heating		1.9	Х	41.1	1.5	4.6	Х	
	Process Cooling and Refrigeration		7.1	X	X	0.1	0.0	X	
	Machine Drive		1.0	X	6.9	1.1	1.3	X	

	Floatus Chamical Brassess		0.2						
	Electro-Chemical Processes Other Process Use		0.3 20.4						
				X	0.0	25.7 1.4	0.0 1.5	X X	
	Direct Uses-Total Nonprocess		1.7	X					
	Facility HVAC (g)		1.7	X	0.0	1.6	5.0	X	
	Facility Lighting		2.3				 OF 4		
	Other Facility Support		5.0	X	0.0	3.1	85.4	X	
	Onsite Transportation		3.9		0.0	0.1	1.3	 	
	Conventional Electricity Generation			X	X	3.0	X	X	
	Other Nonprocess Use		0.0	X	0.0	X	X	X	
	End Use Not Reported	27	24.4	X	X	0.0	80.9	X	3.3
332	FABRICATED METAL PRODUCTS								
332	FADRICATED MICIAL PRODUCTS								
	TOTAL FUEL CONSUMPTION	11.4	10.0	X	69.1	16.1	18.3	70.3	47.4
	Indirect Uses-Boiler Fuel		40.3	X	99.5	35.3	77.6	X	
	Conventional Boiler Use		40.3	X	X	59.0	99.5	X	
	CHP and/or Cogeneration Process		X	X	99.5	40.8	99.5	X	
	Direct Uses-Total Process		10.8	X	55.1	21.5	40.3	X	
	Process Heating		19.3	Х	Х	22.4	57.1	X	
	Process Cooling and Refrigeration		34.3	Х	Х	95.5	X	X	
	Machine Drive		11.5	X	61.1	62.2	50.9	Х	
	Electro-Chemical Processes		70.4						
	Other Process Use		33.3	X	99.5	91.8	87.8	Х	
	Direct Uses-Total Nonprocess		11.8	X	74.5	14.5	21.4	70.3	
	Facility HVAC (g)		13.1	X	99.5	14.3	35.9	70.3	
	Facility Lighting		13.2						
	Other Facility Support		16.8	X	99.5	45.8	97.6	X	
	Onsite Transportation		31.9		83.5	68.5	26.5		
	Conventional Electricity Generation			X	99.5	95.5	Х	Х	
	Other Nonprocess Use		49.1	X	99.5	X	96.5	Х	
	End Use Not Reported	39.1	54.7	X	X	76.1	59.0	X	47.4
333	MACHINERY								
	TOTAL FUEL CONSUMPTION	11.9	17.2	99.0	29.7	13.0	28.0	99.0	48.5
	Indirect Uses-Boiler Fuel		40.1	99.0	0.0	24.0	86.0	X	
	Conventional Boiler Use		40.1	X	X	53.4	X	X	
	CHP and/or Cogeneration Process		X	99.0	0.0	25.9	86.0	X	
	Direct Uses-Total Process		20.1	X	38.6	23.6	63.5	X	
	Process Heating		24.0	X	99.0	28.6	70.6	X	
	Process Cooling and Refrigeration		20.2	X	X	71.2	X	X	
	Machine Drive		23.9	X	52.0	41.0	47.1	X	
	Electro-Chemical Processes		56.2						
	Other Process Use		49.5	X	39.6	38.5	56.3	X	

	Direct Uses-Total Nonprocess		15.5	99.0	44.2	13.1	20.9	99.0	
	Facility HVAC (g)		14.3	99.0	58.4	13.3	34.5	99.0	
	Facility Lighting		18.8						
	Other Facility Support		20.0	X	X	37.0	94.2	X	
	Onsite Transportation		21.3		55.0	49.4	21.0		
	Conventional Electricity Generation			X	79.4	60.8	99.0	X	
	Other Nonprocess Use		75.7	X	38.8	41.9	24.1	X	
	End Use Not Reported	47.6	74.4	X	X	94.8	59.5	X	48.5
334	COMPUTER AND ELECTRONIC PRODUCTS								
	TOTAL FUEL CONSUMPTION	6	6.7	0.0	57.2	10.4	48.0	X	35.1
	Indirect Uses-Boiler Fuel		27.7	0.0	23.7	11.6	0.0	X	
	Conventional Boiler Use		27.7	X	13.5	15.6	0.0	X	
	CHP and/or Cogeneration Process		X	0.0	26.4	8.5	X	X	
	Direct Uses-Total Process		7.6	X	88.3	16.7	69.0	X	
	Process Heating		8.6	X	88.8	9.7	74.1	X	
	Process Cooling and Refrigeration		22.4	X	X	39.8	X	X	
	Machine Drive		5.9	X	28.2	74.9	71.8	X	
	Electro-Chemical Processes		12.7						
	Other Process Use		3.9	X	27.9	7.1	X	X	
	Direct Uses-Total Nonprocess		7.9	0.0	39.4	17.1	54.6	X	
	Facility HVAC (g)		7.3	0.0	64.6	18.4	82.7	X	
	Facility Lighting		14.7						
	Other Facility Support		9.9	X	59.2	22.9	55.0	X	
	Onsite Transportation		21.7		13.6	96.2	42.5		
	Conventional Electricity Generation			X	5.6	96.2	X	X	
	Other Nonprocess Use		21.6	X	11.0	3.1	9.6	X	
	End Use Not Reported	24.8	28.0	X	X X	29.2	0.0	X	35.1
	Liiu Ose Not Reported	24.0	28.0	· · · · · · · · · · · · · · · · · · ·	<u>^</u>	23.2	0.0	^	33.1
334413	Semiconductors and Related Devices								
	TOTAL FUEL CONSUMPTION	3.3	3.3	0.0	1.2	3.6	13.2	X	6.0
	Indirect Uses-Boiler Fuel		6.2	0.0	0.0	1.2	0.0	Х	
	Conventional Boiler Use		6.2	Х	0.0	1.6	0.0	Х	
	CHP and/or Cogeneration Process		Х	0.0	0.0	2.0	X	X	
	Direct Uses-Total Process		2.3	Х	22.6	3.5	65.3	X	
	Process Heating		5.8	Х	Х	1.6	65.3	X	
	Process Cooling and Refrigeration		3.4	Х	Х	Х	Х	X	
	Machine Drive		3.4	Х	28.2	Х	Х	Х	
	Electro-Chemical Processes		6.6						
	Other Process Use		2.7	Х	27.9	7.2	X	X	
	Direct Uses-Total Nonprocess		7.3	Х	3.4	10.1	12.7	X	
	Facility HVAC (g)		8.2	Х	23.2	12.0	65.3	X	
									

	Facility Lighting		4.8						
	Other Facility Support		2.2	X	59.2	2.5	3.7	X	
	Onsite Transportation		5.0		0.1	X	0.6		
	Conventional Electricity Generation			Х	2.0	X	X	X	
	Other Nonprocess Use		21.9	Х	5.7	1.4	0.0	X	
	End Use Not Reported	1.1	1.2	Х	X	0.0	0.0	X	6.0
335	ELEC. EQUIP., APPLIANCES, COMPONENTS								
	TOTAL FUEL CONSUMPTION	10.7	8.8	47.2	23.6	15.1	24.5		51.4
	Indirect Uses-Boiler Fuel		74.6	X X	91.3	35.0	98.9	X X	J1.4
	Conventional Boiler Use		74.6	X	91.3	31.7	X	X	
	CHP and/or Cogeneration Process		X X	X	X X	53.9	98.9	X	
	Direct Uses-Total Process		8.5	X	62.3	17.0	61.8	X	
	Process Heating		16.3	X	X	18.1	63.8	X	
	Process Cooling and Refrigeration		16.1	X	X	66.7	X	X	
	Machine Drive		10.0	X	41.4	50.5	X	X	
	Electro-Chemical Processes		42.5						
	Other Process Use		29.8	X	98.4	52.4	79.4	X	
	Direct Uses-Total Nonprocess		12.4	47.2	25.6	13.9	25.5	X	
	Facility HVAC (g)		12.2	X	X	13.1	44.4	X	
	Facility Lighting		14.2						
	Other Facility Support		14.1	X	X	40.7	X	X	
	Onsite Transportation		22.3		26.8	87.7	26.4		
	Conventional Electricity Generation			X	86.8	87.7	X	X	
	Other Nonprocess Use		85.5	47.2	48.4	95.7	95.9	X	
	End Use Not Reported	40	58.2	X	X	58.4	55.0	X	51.4
	Lind Oct Not Reported		30.2			30.1	33.0		
336	TRANSPORTATION EQUIPMENT								
	TOTAL FUEL CONSUMPTION	7.9	9.2	10.2	26.4	8.5	13.5	X	6.8
	Indirect Uses-Boiler Fuel		7.0	0.0	2.4	6.1	33.4	X	
	Conventional Boiler Use		7.0	0.0	0.0	4.9	37.2	X	
	CHP and/or Cogeneration Process		X	0.0	65.7	11.8	58.9	X	
	Direct Uses-Total Process		11.6	91.0	43.2	13.8	20.5	X	
	Process Heating		23.6	X	X	14.7	27.7	X	
	Process Cooling and Refrigeration		30.2	X	X	24.7	21.6	X	
	Machine Drive		13.6	X	48.4	19.8	70.6	X	
	Electro-Chemical Processes		17.6						
	Other Process Use		21.6	91.0	32.8	37.6	32.6	X	
	Direct Uses-Total Nonprocess		6.6	61.5	21.8	14.4	15.3	X	
	Facility HVAC (g)		6.9	X	34.3	15.3	17.8	X	
	Facility Lighting		10.1						
	Other Facility Support		9.3	X	0.2	12.7	11.5	X	
	- · · · I · · FF · ·								

	Onsite Transportation		17.9		24.0	47.3	17.3		
	Conventional Electricity Generation			Х	38.5	1.1	0.0	Х	
	Other Nonprocess Use		26.8	61.5	16.4	8.4	25.6	Х	
	End Use Not Reported	9.4	56.0	X	X	38.5	7.1	X	6.8
336111	Automobiles								
	TOTAL FUEL CONSUMPTION	0.0	0.0	X	0.0	0.0	0.0	X	0.0
	Indirect Uses-Boiler Fuel		0.0	Х	X	0.0	X	Х	
	Conventional Boiler Use		0.0	Х	Х	0.0	X	Х	
	CHP and/or Cogeneration Process		X	Х	X	0.0	X	X	
	Direct Uses-Total Process		0.0	Х	0.0	0.0	0.0	X	
	Process Heating		0.0	Х	X	0.0	0.0	X	
	Process Cooling and Refrigeration		0.0	Х	X	0.0	0.0	X	
	Machine Drive		0.0	X	0.0	0.0	0.0	X	
	Electro-Chemical Processes		0.0						
	Other Process Use		0.0	X	0.0	0.0	0.0	X	
	Direct Uses-Total Nonprocess		0.0	X	0.0	0.0	0.0	X	
	Facility HVAC (g)		0.0	X	X	0.0	0.0	X	
	Facility Lighting		0.0						
	Other Facility Support		0.0	X	X	0.0	0.0	X	
	Onsite Transportation		0.0		0.0	X	0.0		
	Conventional Electricity Generation			X	0.0	0.0	0.0	X	
	Other Nonprocess Use		0.0	X	0.0	X	0.0	X	
	End Use Not Reported	0.0	0.0	X	X	0.0	0.0	X	0.0
336112	Light Trucks and Utility Vehicles								
	TOTAL FUEL CONSUMPTION	0.0	0.0	X	0.0	0.0	0.0	X	0.0
	Indirect Uses-Boiler Fuel		0.0	X	X	0.0	0.0	X	
	Conventional Boiler Use		0.0	X	X	0.0	0.0	X	
	CHP and/or Cogeneration Process		X	X	X	0.0	X	X	
	Direct Uses-Total Process		0.0	X	0.0	0.0	0.0	X	
	Process Heating		0.0	X	X	0.0	0.0	X	
	Process Cooling and Refrigeration		0.0	X	X	0.0	X	X	
	Machine Drive		0.0	X	0.0	0.0	0.0	X	
	Electro-Chemical Processes		0.0	 				 	
	Other Process Use		0.0	X	X	0.0	0.0	X	
	Direct Uses-Total Nonprocess		0.0	X	0.0	0.0	0.0	X	
	Facility HVAC (g)		0.0	X	X	0.0	0.0	X	
	Facility Lighting		0.0				 		
	Other Facility Support		0.0	X	0.0	0.0	X	X	
	Onsite Transportation		0.0		0.0	0.0	0.0		
	Conventional Electricity Generation			X	0.0	0.0	X	X	

	Other Nonprocess Use		0.0	X	0.0	Х	Х	Х	
	End Use Not Reported	0.0	Х	Х	Х	0.0	0.0	Х	0.0
3364	Aerospace Products								
	TOTAL FUEL CONCLINATION		4.2			2.0	40.5		
	TOTAL FUEL CONSUMPTION Indirect Uses-Boiler Fuel	3	4.2 12.7	0	3.9 2.4	2.8	18.5 36.7	X	0.9
	Conventional Boiler Use		12.7	0 X	0	2.6 4.2	38.9	X X	-
	CHP and/or Cogeneration Process		X	0	65.7	1	0	^ X	
	Direct Uses-Total Process		3.6	X	4.5	4.1	7	X	
	Process Heating		3.2	X	X X	5	0.8	X	
	Process Cooling and Refrigeration		5.7	X	X	0	22	X	
	Machine Drive		4.1	X	0	7.8	61.7	X	
	Electro-Chemical Processes		16						
	Other Process Use		11.2	X	5.4	6	14.5	X	
	Direct Uses-Total Nonprocess		6.3	X	8.3	2.7	21.3	X	
	Facility HVAC (g)		10.2	X	0.0	3.1	35.7	X	
	Facility Lighting		3.5						
	Other Facility Support		2.6	X	1.6	2.0	2.6	X	
	Onsite Transportation		5.1		9.7	2.0	6.7		
	Conventional Electricity Generation			X	31.4	45.9	0.0	X	
	Other Nonprocess Use		3.7	X	0.8	0.8	0.4	X	
	End Use Not Reported	8.1	28.5	X	X	59.3	12.9	X	0.9
336411	Aircraft								
	TOTAL FUEL CONSUMPTION	5.6	10.0	X	8.0	1.6	52.7	X	0.1
	Indirect Uses-Boiler Fuel		4.2	X	0.0	0.7	74.6	X	
	Conventional Boiler Use		4.2	X	0.0	0.1	74.6	X	
	CHP and/or Cogeneration Process		X	X	X	29.0	X	X	
	Direct Uses-Total Process		2.8	X	0.0	5.1	X	X	
	Process Heating		5.2	X	X	4.6	X	X	
	Process Cooling and Refrigeration		4.1	X	X	0	X	X	
	Machine Drive		3.0	X	0.0	25.6	X	X	
	Electro-Chemical Processes		6.3				X	 	
	Other Process Use		11.6	X	0.0	0.0	54.6	X	
	Direct Uses-Total Nonprocess		14.8	X	10.6 X	1.8	88.6	X	
	Facility HVAC (g) Facility Lighting		22.3 2.4	X	X	1.9	88.0	X	
			1.7	 V	0.0		X	X	-
	Other Facility Support Onsite Transportation		0.5	X	11.1	1.1 0.0	7.4	^	
	Conventional Electricity Generation		0.3	X	0.0	X	7.4 X	X	
	Other Nonprocess Use		73.8	X	15.6	X	X	X	
	End Use Not Reported	0.1	0.0	X	X X	X	47.4	X	0.1
	Life OSE NOT REPORTED	U.1	0.0	^		^		^	

TOTAL FUEL CONSUMPTION 11.3 8.6 X 60.4 12.4 24.6	75.8 X X X 75.8 75.8 X X X 75.8	49.1
Indirect Uses-Boiler Fuel 40.7 X 86.7 36.6 96.1 Conventional Boiler Use 40.7 X X X 37.0 99.0 CHP and/or Cogeneration Process X X X 86.7 50.4 90.9 Direct Uses-Total Process X X 97.4 19.6 61.1 Process Heating 24.2 X X 21.8 70.3 Process Cooling and Refrigeration 28.5 X X 78.7 99.0 Machine Drive 10.7 X 97.4 64.7 93.7 Electro-Chemical Processes 90.2 Other Process Use 41.7 X X X 63.5 63.7	X X X 75.8 75.8 X X X X	49.1
Conventional Boiler Use 40.7 X X X 37.0 99.0 CHP and/or Cogeneration Process X X 86.7 50.4 90.9 Direct Uses-Total Process 10.2 X 97.4 19.6 61.1 Process Heating 24.2 X X 21.8 70.3 Process Cooling and Refrigeration 28.5 X X 78.7 99.0 Machine Drive 10.7 X 97.4 64.7 93.7 Electro-Chemical Processes 90.2 Other Process Use 41.7 X X X 63.5 63.7	X X 75.8 75.8 X X X X	
CHP and/or Cogeneration Process X X 86.7 50.4 90.9 Direct Uses-Total Process 10.2 X 97.4 19.6 61.1 Process Heating 24.2 X X X 21.8 70.3 Process Cooling and Refrigeration 28.5 X X 78.7 99.0 Machine Drive 10.7 X 97.4 64.7 93.7 Electro-Chemical Processes 90.2 Other Process Use 41.7 X X X 63.5 63.7	X 75.8 75.8 X X X X 75.8	
Direct Uses-Total Process 10.2 X 97.4 19.6 61.1 Process Heating 24.2 X X X 21.8 70.3 Process Cooling and Refrigeration 28.5 X X 78.7 99.0 Machine Drive 10.7 X 97.4 64.7 93.7 Electro-Chemical Processes 90.2	75.8 75.8 X X X X 75.8	
Process Heating 24.2 X X 21.8 70.3 Process Cooling and Refrigeration 28.5 X X 78.7 99.0 Machine Drive 10.7 X 97.4 64.7 93.7 Electro-Chemical Processes 90.2	75.8 X X X X 75.8	
Process Cooling and Refrigeration 28.5 X X 78.7 99.0 Machine Drive 10.7 X 97.4 64.7 93.7 Electro-Chemical Processes 90.2 <td>X X X 75.8</td> <td> </td>	X X X 75.8	
Machine Drive 10.7 X 97.4 64.7 93.7 Electro-Chemical Processes 90.2	X X 75.8	
Electro-Chemical Processes 90.2 41.7 X X 63.5 63.7	 X 75.8	
Other Process Use 41.7 X X 63.5 63.7	75.8	
	75.8	
Direct Uses-Total Nonprocess 9.5 Y 57.1 14.9 27.4		
5.5 A 57.1 14.5 27.4	75.8	
Facility HVAC (g) 12.2 X 79.0 13.2 55.9		
Facility Lighting 9.1		
Other Facility Support 18.3 X X 77.4 99.0	X	
Onsite Transportation 22.0 30.2 81.7 20.6		
Conventional Electricity Generation X 78.8 52.4 99.0	X	
Other Nonprocess Use 63.6 X 84.4 X 0.0	X	
End Use Not Reported 43.0 59.9 X X 78.3 90.6	X	49.1
339 MISCELLANEOUS		
TOTAL FUEL CONSUMPTION 12.2 11.1 X 59.8 17.6 45.0	99.0	6.7
Indirect Uses-Boiler Fuel 33.3 X 99.0 35.8 87.5	X	
Conventional Boiler Use 33.3 X X 25.6 88.1	X	
CHP and/or Cogeneration Process X X 99.0 45.3 99.0	X	
Direct Uses-Total Process 11.8 X 19.5 23.9 64.7	99.0	
Process Heating 19.6 X 0.0 26.0 70.1	99.0	
Process Cooling and Refrigeration 26.0 X X 58.8 X	X	
Machine Drive 10.7 X 93.4 46.2 59.3	X	
Electro-Chemical Processes 63.3		
Other Process Use 61.8 X X 64.9 X	X	
Direct Uses-Total Nonprocess 11.9 X 65.0 17.7 36.6	X	
Facility HVAC (g) 10.5 X 69.8 15.0 43.3	X	
Facility Lighting 11.8		
Other Facility Support 12.8 X 0.0 27.3 97.3	X	
Onsite Transportation 17.7 24.4 91.6 56.8		
Conventional Electricity Generation X 92.6 93.9 X	Х	
Other Nonprocess Use 84.2 X 28.0 98.9 72.5	Х	
End Use Not Reported 6.7 46.3 X X 82.6 82.9	Х	6.7

⁽a) The Bureau of the Census classifies establishments using the 2017 North American Industry Classification System (NAICS).

- (b) Net Electricity is obtained by summing purchases, transfers in, and generation from noncombustible renewable resources, minus quantities sold and transferred out. It does not include electricity inputs from onsite cogeneration or generation from combustible fuels because that energy has already been included as generating fuel (for example, coal).
- (c) Distillate Fuel Oil includes Nos. 1, 2, and 4 fuel oils and Nos. 1, 2, and 4 diesel fuels.
- (d) Natural Gas includes natural gas obtained from utilities, local distribution companies, and any other supplier(s), such as independent gas producers, gas brokers, marketers, and any marketing subsidiaries of utilities.
- (e) Hydrocarbon Gas Liquids (HGL) include ethane, ethylene, propane, propylene, normal butane, butylene, ethane-propane mixtures, propane-butane mixtures, and isobutane produced at refineries or natural gas processing plants, including plants that fractionate raw Natural Gas Liquids (NGL).
- (f) Other includes net steam (the sum of purchases, generation from renewables, and net transfers), and other energy that respondents indicated was used to produce heat and power.
- (g) Facility Heating, Ventilation, and Air Conditioning (Facility HVAC) excludes steam and hot water.
- * Estimate less than 0.5.
- D=Withheld to avoid disclosing data for individual establishments.
- Q=Withheld because Relative Standard Error (RSE) is greater than 50 percent.
- X=Not defined because RSE corresponds to a data table value of zero.
- NA=Not available.
- -- Estimation is not applicable.
- S=Negative value.

Notes: Totals may not equal sum of components because of independent rounding. The estimates presented in this table are for the total consumption of energy (formerly total inputs of energy) for the production of heat, power, and electricity generation, regardless of where the energy was produced. Specifically, the estimates include the quantities of energy that were originally produced offsite and purchased by or transferred to the establishment, plus those that were produced onsite from other energy or input materials not classified as energy, or were extracted from captive (onsite) mines or wells. Allocations to specific end uses are made on the basis of reasonable approximations by respondents.

Source: U.S. Energy Information Administration, Office of Energy Demand and Integrated Statistics, Form EIA-846, 2018 Manufacturing Energy Consumption Survey.

The Census Bureau has reviewed this data product for unauthorized disclosure of confidential information and has approved the disclosure avoidance practices applied (Approval ID: CBDRB-FY20-260).